Centre for Distance Education & Online Education

UNIVERSITY OF JAMMU
JAMMU

SELF LEARNING MATERIAL FOR
B.Ed.
SEMESTER - II

PAPER : Teaching of Social Science **Unit : I – IV**
Course No. : 205 **Lesson No. : 1-12**

Programme Coordinator

Dr. Jaspal Singh Warwal

jaspaljammuuniversity@yahoo.com

Printed and Published on behalf of the Centre for Distance & Online Education, University of Jammu, Jammu by the Director, CD&OE, University of Jammu, Jammu

http:/www.distanceeducationju.in

TEACHING OF ENGLISH

Course Contributors

- **Dr. Gurmeet Singh**,
  Malwa Central College of Education
  for Women, Civil Lines, Ludhiana – 141001
- **Dr. Sindhu Kapoor,**
  SCERT, Jammu
- **Dr. Supreet Kour,**
  Professor
  University School of Open Learning (USOL),
  Panjab University, Chandigarh-160014
- **Dr. Ram Mehar**
  Professor,
  University School of Open Learning (USOL),
  Panjab University, Chandigarh-160014

Format Editing
Dr. Jaspal Singh
CDOE, University of Jammu.
Jammu

Content Editing &
Proof Reading
Dr. Sindhu Kapoor,
SCERT, Jammu

© Centre for Distance & Online Education, University of Jammu, Jammu, 2025

- All rights reserved. No part of this work may be reproduced in any form, by mimeograph or any other means, without permission in writing from the CD&OE, University of Jammu
- The script writed shall be responsible for the lesson/script submitted to the CD&OE and any plagiarism shall be his/her entire responsibility.

Bachelor of Education(B.Ed) through Open and Distance Learning (ODL)
Semester –II
(For the examination to held in the year 2025,2026 & 2027)
Methodology of teaching subject-I

Course no. 205 **Title: Teaching of Social Science**
Credits 4 **Total Marks : 100**
Maximum Marks Internal : 30 **Maximum Marks External : 70**
Duration of Exam : 3hrs
Objectives:
To enable the pupil teachers to:-

- Acquaint themselves with the concept of social science as an integrated/ interdisciplinary area of study.
- Familiarize themselves with the concept of curriculum, text-books and co-curricular activities in social sciences.
- Develop knowledge about the basic principles governing social sciences.
- Prepare a lesson plan. Acquire competency to prepare lesson plans for teaching social sciences.
- Understand some important areas of social sciences.

UNIT-I

1. Meaning ,scope and importance of social sciences in secondary schools. Core subject of social sciences, history, political science, geography, economics, interrelationship between them.
2. Aims and values of teaching social science in secondary schools.
3. Behavioural objectives: Meaning and importance of behavioural objectives, steps for preparing behavioural objectives for teaching of social sciences.

UNIT-II

1. Curriculum:-Meaning, importance and principles of designing a good curriculum for social sciences. Correlation, integration, concentric, spiral unit and chronological approaches in organizing curriculum for social sciences.
2. Textbooks:- Meaning and importance of textbooks in social sciences.Qualitits of a good textbook. Role of library and reference books in teaching of social studies.
3. Co-Curricular activities: Meaning and importance of co-curricular activities. Steps for organizing co-curricular activities. Role and organization of the following in teaching of social studies:-
   - Debates and quizzes.
   - Excursion.
   - Visit to museums.
   - Supervised study
   - Dramatisation

Bachelor of Education(B.Ed) through Open and Distance Learning (ODL)
Semester –II
(For the examination to held in the year 2025,2026 & 2027)
Methodology of teaching subject-I

Course no. 205 **Title: Teaching of Social Science**
Credits 4 **Total Marks : 100**
Maximum Marks Internal : 30 **Maximum Marks External :**
Duration of Exam : 3hrs

UNIT-III

1. Lesson Planning:- Meaning and importance of a lesson plan. Unit and yearly lesson plans.
2. Steps for preparing lesson plans through Herbartain and RCEM approach.
3. Preparing a lesson plan on a topic of social science, remedial teaching.
4.

UNIT –IV

Distribution of resources, environmental degradation and its preservation; disasters and preparedness, interdependence and interaction across space, migration of people, transport and communication, trade and commerce

Sustainable development- economic growth and economic development, indicators of measuring the well being of an economy, Gross Domestic Product,poverty,food security, role and functions of money.

Sessional Work

- Analysis of a unit/chapter in a social science textbook to identify the concept.

Note for Paper Setters

The Question paper consists of 9 questions having Q no 1 as Compulsory having four parts spread over the entire Syllabus, with a weightage of 14 marks .The rest of Question paper is divided into four Units and the students are to attend four Questions from these units with the internal choice. The essay type Question carries 14 marks each. Unit IV having the sessional work/field work (section) could also be a part of the theory paper.

Internship/field work Unit IV having the components/activities of the internship are to be to be developed in the form of the Reflective Journal. All the activities under the internship are to be evaluated for credits and hence all the activities are to be showcased by the trainee and are to be fully recorded with the complete certification of itsgenuineness .

The Theory paper is to have 70 marks (external) . 30 Marks are for the In House activities

Bachelor of Education(B.Ed) through Open and Distance Learning (ODL)
Semester –II
(For the examination to held in the year 2025,2026 & 2027)
Methodology of teaching subject-I

Course no. 205 **Title: Teaching of Social Science**
Credits 4 **Total Marks : 100**
Maximum Marks Internal : 30 **Maximum Marks External : 70**
Duration of Exam : 3hrs

Books recommended

- *NCERT (2013) Social science publication division NCERT campus New Delhi.*
- *S.K Kochar: Teaching of social studies*
- *J.C .Aggrawal : Teaching of social studies*

EDUCATIONAL PLANNING AND MANAGEMENT
CONTENTS

Unit No.	Lesson No.	Title	Lesson Writers	Page No.
I **Teaching of Social Sciences -**	Lesson 1	Meaning, scope and importance of social science in secondary schools. Core subject of social science, history, political science, geography, economics, interrelationship between them.	Dr. Gurmeet Singh	1
	Lesson 2	Aims and values of teaching social science in secondary schools.		20
	Lesson 3	Behavioural objectives: Meaning and importance of behavioural objectives, steps for preparing behavioural objectives for teaching of social science.		30
II **Curriculum:**	Lesson 4	Meaning, importance and principles of designing a good curriculum for social science.	Dr. Sindhu Kapoor	44
	Lesson 5	Correlation, integration, concentric, spiral unit and chronological approaches in organizing curriculum for social science.		53

Unit No.	Lesson No.	Title	Lesson Writers	Page No.
II	Lesson 6	Textbooks: Meaning and importance of textbooks in social sciences. Qualities of a good textbooks. Role of library and reference books in teaching of Social Studies.	Dr. Sindhu Kapoor	81
	Lesson 7	Co-Curricular activities: Meaning and importance of co-curricular activities. Steps for organizing co-curricular activities. Role and organization of the following in teaching of social studies: • Debates and quizzes. • Excursion. • Visit to museums. • Supervised study • Dramatisation		95
III **Lesson Planning:-**	Lesson 8	Meaning and importance of a lesson plan. Unit and Yearly lesson plans.	Dr. Supreet Kaur	137
	Lesson 9	Steps for preparing lesson plans through Herbartian and RCEM approach.		148
	Lesson 10	Preparing a lesson plan on a topic of social science each on RCEM & constructivism approach, remedial teaching.		158

Unit No.	Lesson No.	Title	Lesson Writers	Page No.
IV	Lesson 11	Distribution of resources, environmental degradation and its preservation; disasters and preparedness, interdependence and interaction across space, migration of people, transport and communication, trade and commerce.	Dr. Ram Mehar	176
	Lesson 12	Sustainable development-economic growth and economic development, indicators of measuring the well being of an economy, Gross Domestic Product, poverty, food security, role of money and functions of money.		231

LESSON NO. 1 UNIT–I

MEANING, SCOPE AND IMPORTANCE OF SOCIAL SCIENCE

1.0 STRUCTURE

1.1 Introduction

1.2 Objectives

1.3 Meaning

1.4 Scope of Social Science

1.5 Importance of Teaching Social Science

1.6 Core Subjects of Social Science

1.6.1 History

1.6.2 Geography

1.6.3 Political Science

1.6.4 Economics

1.7 Interrelation among History, Geography, Political Science, Economics

1.7.1 Relation between History and Geography

1.7.2 Relation between History and Political Science

1.7.3 Relation between History and Economics

1.7.4 Relation between Geography and Political Science

1.7.5 Relation between Geography and Economics

1.7.6 Relation between Political Science and Economics

1.8 Let Us Sum Up

1.9 Lesson End Exercise

1.10 Suggested Further Readings

1.11 Answers to Check Your Progress

1.1 INTRODUCTION

Social Science is a subject which is included in the secondary school curriculum. It offers a systematic study of man in relation to social and physical environment. In a democratic country like India where we need to develop democratic citizenship, subject like Social Science plays role of pivotal importance. Future citizens of India are provided necessary information about social and physical environment along with economic and political system in the school through subjects like Social Science as it is the study of political, economic, cultural and environmental aspects of societies in the past, present and future.

1.2 OBJECTIVES

After going through this lesson, you shall be able to:

- define Social Science,
- explain the scope of Social Science,
- discuss the importance of Social Science,
- describe core subjects of Social Science, and
- explain correlation among core subjects of Social Science

1.3 MEANING OF SOCIAL SCIENCE

Social Science is a group of academic disciplines that examines society and how people interact and develop as a culture.

Different scholars have given definitions of Social Science:

Seligman defined Social Science as those mental or cultural sciences which deal with the activities of the individual as member of the group. The term Social Science thus embraces all those subjects which deal with the relationship of man to the society.

According to Jarolimick 'Social Science is the study of human relations.'

According to Michels 'Social Science is the study of the activities of social and physical environment'. High has defined Social Science as "those bodies of learning and study which recognizes the simultaneous and mutual action of physical and no- physical stimuli which produce social relation".

According to Beard 'Social Science is a body of knowledge and thought pertaining to human affairs as distinguished from sticks, stones, stars and physical objects'.

Bining and Bining (1982) define Social Science as "The subject that relates to the origin, organization, and development of human society, especially to man in his association with other men".

According to Fairchild 'Social Science is a general term used for all the sciences which are concerned with the human affairs.'

According to Lewis 'Social Science is concerned with the laws that govern society and the social department of man.'

According to Webster's Third New International Dictionary ‘Social Science is the branch of knowledge that deals with the institutions and functioning of human society and with the interpersonal relationship of individuals as members of society'.

According to New Encyclopedia Britannica 'Social Science is any discipline or branch of the science that deals with the social and cultural aspect of human behaviour'.

According to Macinnes ‘Social Science is the scientific study of society and the ways in which we relate to one another. It helps explain how society works- from the causes of unemployment or what drives economic growth, to how and why people vote, or what makes people happy’.

American Heritage Dictionary (2006) defined Social Science as a scholarly or scientific discipline that deals with such study, generally regarded as including Sociology, Psychology, Anthropology, Economics, Political Science, and History.

Social Science can be defined as the scientific study of social, cultural, psychological, economic, and political forces that guide individuals in their actions. It includes all those subjects which deal relationship of man with his social, physical, political and economic environment.

The Social Science consists of a number of disciplines that study human aspects of the world. It differs from the arts and humanities in so far as the Social Science emphasizes the use of scientific method, including quantitative and qualitative methods. They differ from the natural

sciences in so far as the focus is broadly on human behaviour and human interaction with the physical and social environment.

It can be concluded that:

a) Social Science is advanced study of human society.

b) Social Science represents an adult approach.

c) Social Science is the theory part of human affairs.

d) Social Science lays more emphasis on knowledge.

e) Social Science aims at finding new truth about human relations.

f) Social Science is included at higher classes.

g) Social Science has wide scope for research studies.

1.4 SCOPE OF SOCIAL SCIENCE

Scope of Social Science is vast, it includes study of human relation, study of man-made institutions, society related study, study of past based incidents, development of citizen related traits, study of natural science and development, study of relations based on internationalism.

According to Verheggen and Baerveldt (2001) 'Social Science is commonly used as an umbrella term to refer to a plurality of fields outside of the Natural Sciences. These fields include: (i) Anthropology, (ii) Archaeology,
(iii) Economics, (iv) Geography, (v) History, (vi) Linguistics, (vii) Political Science, (viii) Sociology, and in certain context (ix) Psychology.

According to Fairchild Social Science includes: (i) Economics, (ii) Government, (iii) Law, Psychology, (iv) Sociology, and (v) Anthropology.

Ranganathan has included Education, Geography, History, Political Science, Economics, Sociology, and Law in Social Science.

According to Burns Social Science includes: (i) History, (ii) Human Geography, (iii) Biology, (iv) Social Anthropology, (v) Cultural Anthropology,

(vi) Sociology Economics, (vii) Political Science, (viii) Jurisprudence, and (ix) Ethics.

According to Hasgues Social Science includes: (a) Sociology, (b) Anthropology, (c) Social Pathology, (d) Cultural Geography, (e) Economics, (f) Political Science, and (g) History.

According to Ogburn and Goldenweiser Social Science includes: (i) Anthropology, (ii) Economics, (iii) History, (iv) Political Science, and (v) Sociology.

Wilson has included Sociology, Economics, Anthropology, statistics, Psychology, jurisprudence, History, Philosophy, and Political Science in SocialScience.

According to New Encyclopedia Britannica 'the Social Sciences generally include Economics, Political Science, Sociology and Social Psychology'

According to UNESCO's International Committee for Social Science Documentation Social Science includes: (i) Sociology, (ii) Political Science, (iii) Economics, and (iv) Social and Cultural Anthropology.

According to Macinnes in UK subjects included in Social Science are:

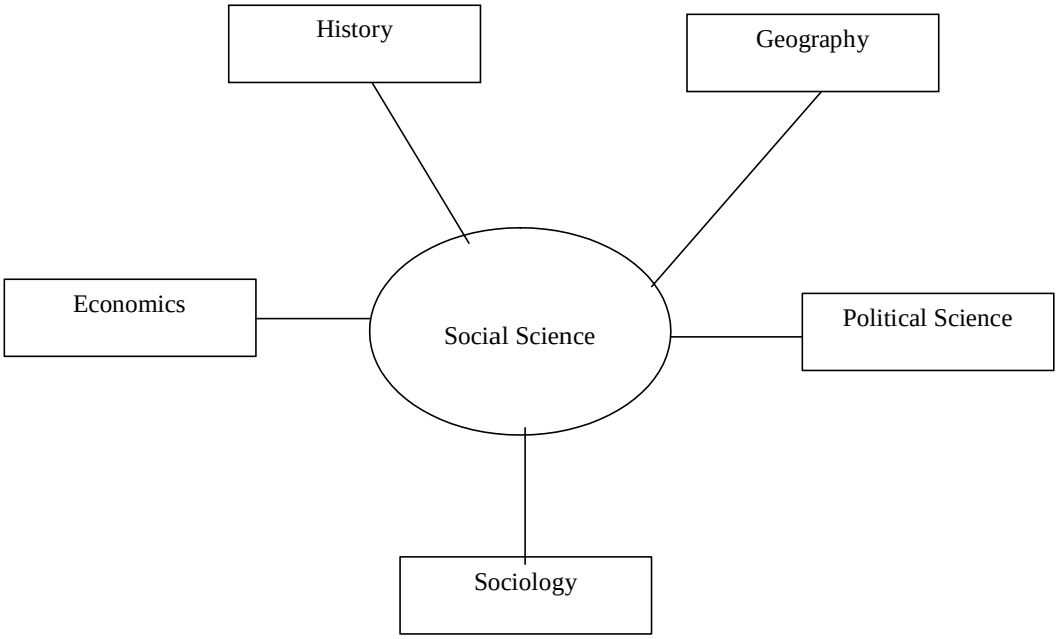
(a) Area studies, (b) Criminology, (c) Education, (d) Environmental Planning,

(e) Human Geography and Demography, (f) International Relations, (g) Linguistics,

(h) Management and Business Studies, (i) Political Science, (j) Population Health,

(k) Social Analytics, (l) Social Anthropology, (m) Socio-Legal Studies, (n) Social Policy, (o) Social Sciences, (p) Social Work, and (q) Sociology

Social Science which is taught at senior secondary school level in India includes History, Geography, Civics/Political Science, Sociology and Economics. At level of Middle and Secondary School education in India History, Geography, Civics/Political Science, and Economics are taught as a part of social studies. Social Science is a branch of study which begins at secondary and senior secondary school level in India and continues at college and university level for specialization.



Social Science taught in Indian schools

The scope of Social Science subject can be briefly explained as:

a) Perspective and knowledge of Social Science are indispensable in building the knowledge base for a just and peaceful society.

b) The contents of Social Science aim at raising the student's awareness through critically exploring and questioning the familiar social reality.

c) It provides the social, cultural and analytical skills required to adjust to an increasingly interdependent world, and to deal with political and economic realities.

d) The Social Science carries a normative responsibility of creating a strong sense of human values namely freedom, trust, mutual respect, and respect for diversity.

e) Social Science teaching aims at generating in the students a critical, moral, and mental energy, making them alert to the social forces that threaten these values.

1.5 IMPORTANCE OF TEACHING SOCIAL SCIENCE

No field of study is more important to human beings than the Social Science. To understand society is to learn not only the conditions that limit our lives but also the opportunities open to us for improving the human condition. Knowledge of Social Science can thus help us to improve our society.

'The Social Science encompasses diverse concerns of society, and include a wide range of content drawn from the disciplines of History, Geography, Political Science, Economics, Sociology and Anthropology. Social Science perspectives and knowledge are indispensable to building the knowledge base for a just and peaceful society. The content should aim at raising students' awareness through critically exploring and questioning of familiar social reality. The possibilities of including new dimensions and concerns, especially in view of students' own life experiences, are considerable. Selecting and organizing material into a meaningful curriculum, one that will enable students to develop a critical understanding of society, is therefore a challenging task' (National Curriculum Frameworks, 2005).

According to NCERT (2006) Social Science encompasses diverse concerns of society and include a wide a range of content, drawn from the disciplines of History, Geography, Political Science, Economics and Sociology. The selection and organization of material into a meaningful Social Science curriculum, enabling students to develop a critical understanding of society, is therefore a challenging task. The possibilities of including new dimensions and concerns are immense especially in view of the student's own life experiences.

Social Science as a part of school curriculum is important because: (a) With it, man is enabled to solve practical problems, (b) It helps in becoming an efficient citizen of democracy, (c) It has significance to develop an international viewpoint,
(d) It helps forms mans social character, (e) Man is made duty bound, (f) It enlightens the path of progress and advancement, (g) It is important for moral progress of society, (h) Important for institutions and communities.

According to NCERT (2006) studying the Social Science is vital for following reasons:

- to understand the society in which they live,
- to learn how society is structured, managed, and governed, and also about the forces seeking to transform and redirect society in various ways,
- to appreciate the values enshrined in the Indian Constitution such as justice, liberty, equality and fraternity and the unity and integrity of the nation and the building of a socialist, secular and democratic society,
- to grow up as active, responsible, and reflective members of society,
- to learn to respect differences of opinion, lifestyle, and cultural practices,
- to question and examine received ideas, institutions, and practices,

- to acquire pleasure in reading, by providing them with enjoyable reading material, and
- to undertake activities that will help them develop social and life skills andmake them understand that these skills are important for social interaction.

Check Your Progress - 1

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

Multiple Choice Questions

1. Social Science is a academic discipline that examines _____

   (a) Society (b) Individual

   (c) Group of society (d) All of above

2. Who said, "Social Science is the study of human relation"

   (a) Spencer (b) Darwin

   (c) Fair child (d) Jarolimick

3. Social Science lays more emphasis on _____

   (a) Practical life (b) Knowledge

   (c) Reading (d) None of the above

4. Social Science has wide scope for _____ studies

   (a) Child (b) Adult

   (c) Research (d) All of the above

5. Which one is not the core subject of Social Science?

   (a) History (b) Political Science

   (c) Geography (d) Physics

1.6 CORE SUBJECTS OF SOCIAL SCIENCE

Social Science, at present learnt in Indian schools comprises of History, Geography, Political Science, and Economics. It includes all the issued faced by contemporary Indian society. Core subjects of Social Science includes:

1.6.1 History: The word History is derived from the Greek word 'Historia' which means 'research' or 'an inquiry conducted to find truth'

'History is record of Man's steps and slips.' It is the analysis and interpreta- tion of the human past enabling us to study continuity and changes that are taking place over time. It is an act of both investigation and imagination that seeks to explain how people have changed over time. It is a means to understand the past and present.

According to Encyclopedia Britannica, "History in the wider sense is all that has happened, not merely all the phenomena of human life, but those of the naturalworld as well. It is everything that undergoes change; and as modern science has shown that there is nothing absolutely static, therefore, the whole universe, and every part of it, has its history."

According to Charlyle 'World History is a biography of great men'. According to Renier 'History is the memories of societies.'According to Durant 'History is a narrative of what civilized men have thought or done in past time.'According to Carr 'History is an unending dialogue between the present and the past and the chief function of historian is to master and understand the past as a key to the understanding of present.' According to Elton 'History is concerned with all those human sayings, thoughts, deeds and sufferings which occurred in the past and have left present deposit; and it deals with them from the point of view of happening change and particular.' According to Acton 'History is the unfolding story of human freedom.'According to Rowse 'History is essentially the record of the life of men in societies in their geographical and their physical environments. Their social and cultural environments arise from the interaction of the one with the other, the society and its geographical condition.'According to Nehru 'History is the story of man's struggle through the ages against nature and the elements against wild beasts and the jungle and some of his own kind who have tried to keep him down and to exploit him for their own benefit.'According to Radhakrishnan 'History is the memory of a nation or a race.' According to Rapson 'History is a connected account of the course of events of progress of ideas.'

1.6.2 Geography: The word 'geography' originates from two Greek words. The first is 'geo' which means 'the earth' and the second Greek word is "graph" which means 'to write'. Therefore, Geography is the science that deals with the description of the Earth's surface.

'Geography is the science which treats the relationship between the earth and man.' Its main subject area covers locating and extending natural and man-made conditions on earth, and intends to stimulate an understanding of how and why these influence one another.

Barrows (1923) defined Geography as 'The study of human ecology; adjustment of man to natural surroundings.' Schaefer (1953) defined Geography as 'The science concerned

with the formulation of the laws governing the spatial distribution of certain features on the surface of the earth.' According to Dickson (1969) 'Geography is fundamentally the regional or chorological science of the surface of the earth.' Holt-Jensen (1980) defined Geography as 'The study of variations in phenomena from place to place.' According to Tuan (1991) 'Geography is the study of earth as the home of people.' According to Wassmansdorf (1995) 'Geography is the study of the patterns and processes of human (built) and environmental (natural) landscapes, where landscapes comprise real (objective) and perceived (subjective) space.'

1.6.3 Political Science: The term 'Political Science' consists of two words, viz, political and science. The word 'politics' is derived from the Greek word 'Polis'

which means the city-state. 'Political Science is that branch of the Social Sciences that studies the state, politics, and government. Political Science deals extensively with the analysis of political systems, the theoretical and practical applications to politics, and the examination of political behavior.

According to Garner 'Political Science begins and ends with the state. Politics is the study of State and Government'. According to Gettel 'Political Science is the historical investigation of what the state has been, an analytical study of what the state is and a political, ethical discussion of what the state ought to be.' According to Leacock 'Political science deals with government only'. According to Janet 'Political science is that part of the social science which treats the foundations of the state and the principles of government'.

According to Laswell 'Politics is the study of influence and the influential' or 'the study of the shaping and sharing of power'. According to Easton 'Politics is the authoritative allocation of values'. According to Catlin 'Political Science is the study of the act of human and social control'. Heywood defined Politics as 'An activity through which people make, preserve and amend the general rules under which they live'. The Oxford English Dictionary defined Political science as 'The science and art of government, the science dealing with form, organization and administration of the state or part of one with the regulation of its relation with other States.'

1.6.4 Economics: The word 'Economics' was derived from two Greek words, oikos (a house) and nemein (to manage) which would mean 'Managing an household' using the limited funds available, in the most satisfactory manner possible.

Smith (1776) defined economics as the science of wealth. He explained how a nation's wealth is created. He considered that the individual in the society wants to promote only his own gain

and in this, he is led by an "invisible hand" to promote the interests of the society though he has no real intention to promote the society's interests. Marshall (1890) defined "Political Economy" or Economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well being. According to Robbins (1932) 'Economics is a science which studieshuman behaviour as a relationship between ends and scarce means which have alternative uses'. Samuelson defined Economics as 'the study of how men and society choose, with or without the use of money, to employ scarce productive resources which could have alternative uses, to produce various commodities over time, anddistribute them for consumption, now and in the future among various people and groups of society'.

Economics is the Social Science that analyzes the production, distribution, and consumption of goods and services (Harper, 2001). Economics is the branch of Social Science that deals with the production and distribution and consumption of goods and services and their management (Blaug, 2007). Economics is a Social Science studying how people attempt to accommodate scarcity to their wants and how these attempts interact through exchange. It is the science of making choices. Modern Economics is a science of rational choice or decision-making under conditions ofscarcity.

1.7 INTERRELATION AMONG HISTORY, GEOGRAPHY, POLITICAL SCIENCE AND ECONOMICS

As all knowledge is interrelated, there are inevitable problems in defining and cataloging the Social Science. Often, it is difficult to know where one Social Science ends and another begins. Not only are the individual Social Sciences interrelated, but the Social Science as a whole body is also related to the natural sciences and the humanities.

1.7.1 Relation between History and Geography

History and Geography are allied subjects. Geography prepares a stage, where the drama of human life is staged. Man creates his physical environments, and Geography describes this environment alone with the work of men. Therefore we think of History without Geography and vice-versa. Right from the 17th century, correlation between these two subjects has been emphasized.

Discovery of different countries of the world and colonization helped people to change the world to suit their purpose. Development of science, industries and commerce is also

determined y all these changes. Hence, when we read the History of the world, of human life and activities, at the same time we also study which geographical man is determined by geographical conditions. Thus children can learn History along with Geography.

History enables us to know how the present life began and from whom we inherited it. On the other hand Geography enlightens us about the earthly factors that condition the conduct of human beings. The evolution of man is also affected by the geographical factors of the world. The way of dressing, habit of talking food, shelter, earning etc. all are determined by Geography. Hence, History and Geography are interrelated.

When we study History, we learn how History and Geography are interrelated. The History of a country to a great extent is influenced by the sea, mountains, rivers, deserts, plain lands etc. The characteristics of people of different states of India are conditioned by geographical factors. Because of this the characteristics of the Oriyas differ from those of the Bengalis, those of Bengalis from the Gujaratis and those of the Gujaratis from Telugus. The three famous battles of Panipat decided the fate of India, because of geographical reasons. Napoleon was defeated in his Russian expedition because of geographical reasons. From these examples we can conclude that History and Geography are interrelated. Good historical maps are always needed for effective teaching of History in schools. Geography thus illustrates History.

Past experiences prove that the human will is more powerful than geographical factors. Example Shivaji could defeat the Mughals; Napoleon and Hitler could become world famous heroes, not because of the Geographical factor, but because of their strong will and confidence could make them so. Therefore, we cannot think of Geography, without the History of man.

This proves that History and Geography are interrelated. It is the responsibility of the History teacher to correlate Geography with History, while teaching History in the class. He should use maps; atlases, globes and other teaching aids to make his teaching successful through correlation.

1.7.2 Relation between History and Political Science

Both Political Science and History are contributory and complementary. Seeley summed up the relationship between History and Political Science beautifully that, "History without Political Science has no fruit and Political Science without History has

no root. According to Freeman "History is past politics and politics present History." According

to Johnson "The study of History in schools has, from the beginning, inlarge part, has been study of the forms of Government, of changes in Government and of actions in Government." According to Willoughby, "History gives us the third dimension of Political Science."

History not merely records events but analyses causes and points out tendencies. It overlaps Political Science. Political Science, however, goes further. It uses historical facts to discover general laws and principles; it selects, analyses and systematizes the facts of History in order to extract the permanent principles of political life. Political Science, further is teleological, that is to say, it deals with the state as it ought to be whereas History deals with what it has been. According to Lipson, "History offers to the student of politics a sense of growth and development and thus affordsinsight into the process of social changes".

Just as Political Science is dependent on History, so History is dependent on Political Science. As a matter of fact, they are complementary to each other. Throwing light on the close intimacy between both the sciences, Burgess points out. "Separate them and the one becomes a cripple, if not corpse, the other a will-of-the wisp." Our study of History is incomplete if we neglect the political events. For example, in India the political movement led by the great revolutionaries of India (Chandra ShekharAzad, Ram Prasad Bismil, Bhagat Singh and Subhash Chandra Bose) have left their impact on Indian History.

1.7.3 Relation between History andEconomics

History is also closely related to Economics. As the activities of a man in society are very closely related with the economic matters, the historian of any period must possess at least a rudimentary knowledge of the Economics. In fact, the economic History of any period is an important branch of History and its understanding is absolutely essential for the proper understanding of History of any period.

There has been a new orientation in our historical outlook from the days of the materialistic interpretation of History by Marx and such class struggle, man's skill in earning, arts and crafts, trade, business and commerce, land revenue, taxes and a host of all other economic activities of the past figure very prominently in History.

No doubt, it is true that during the last few years Economics has become very complex and difficult subject, mostly dependent on mathematics, and a modern historian cannot acquire basic working knowledge of economic theorywithout devoting a lot of time and leaving little time for the study and writing of History.

Therefore, a new set of economic History by the use of economic historians have

emerged who try to study the economic History by the use of the economic tools. At present, History is so closely interlinked with the study of economic problems that it would not be possible to reconstruct History without knowledge of the relevant Economic problems.

Economics deals with production, distribution, consumption and exchange of wealth. The aim of teaching Economics will fail without the knowledge of History of mankind. While History gives an account of the events and experiences in the life of man, Economics describes the activities of production and consumption of wealth by man. All the economic activities undertaken by man in the past are found in the pages of History. From the study of History, we know how in different periods of History men underwent different vocations to increase productivity, Thus the History of Economics influences the present Economic policies and this in turn help us to formulate Economic theories.

According to Marks "Economic conditions play a very important role in the formation of History." The downfall of many reigns (Czar in Russia), outbreak of many wars (1857 revolt in India, First and second world wars), revolutions (French Revolution) were the outcome of Economics causes. Many civilizations developed in the places of Economic Importance. We also know, how at different stages of History, India was under the foreign yoke, because of her economic prosperity. Hence History and Economics are interrelated.

Every single piece of economic theory is ultimately a piece of crystallized history. And you have a much deeper and sophisticated form of knowledge if you know the history, the events, what happened … if you just do the theory, if you just do the crystallized history stuff, there is a sense in which your thought processes are on crack - you're doing the crystal stuff rather than the lines' (Brad DeLong).

1.7.4 Relation between Geography and Political Science

There is a close intimacy between Political Science and Geography. "Geo" means earth and "graphy" means description and the description of the earth is known as geography. It is the science of "the earth's surface, form, physical features, natural and political divisions, climate, production, population."

A political investigator studies Geographywith a view to knowing the influence of the geographical conditions and the physical environment on Political Science. Geo- politics gives him useful information regarding the study of the origin and growth of political institutions. The historical survey of the political institutions of a country is closely linked with the nature of the soil, mountains, plains, livers and insularity.

Aristotle was of the opinion that without Geography neither political nor strategically wisdom can go far. Bodin was the first modem writer who dwelt upon the relationship between Political Science and Geography. Rousseau tried to establish a relationship between climatic conditions and forms of government. He argued that warm climates are conducive to despotism, cold climates to barbarism and moderate climates to a good polity. Montesquieu, another French scholar, also emphasized the influence of physical environments on the forms of Government and liberty of the people.

1.7.5 Relation between Geography and Economics

One part of Geography known as Economic Geography shows the close relationship between Geography and Economics. Prosperity of a state depends upon the Geographical conditions. Favourable Geographical conditions have led the prosperity of the people of Punjab and Haryana.

Geography, relating to the study of physical features as well as of human activity, is absolutely central to a practical understanding of how any economy functions – since every economy is comprised of people operating in a particular setting. Similarly, the study of economics and economic principles is central to understanding and predicting how individuals and groups are likely to rationally respond to various economic incentives.

Development of industry, agriculture depends upon Geographical conditions.

Even the town planning is done keeping in mind the Geographical conditions.

The Economic development leaves impact on the Geographic conditions. Dams are built, cannels are constructed, roads are built and natural environment is altered.

1.7.6 Relation between Political Science and Economics

The objective of both Political Science and Economics is human welfare. Any economy develops when there is conducive environment for the economic activities. The conducive environment is developed in the country when there is peaceful political condition. Political Stability leads to Economic development. The Economic structure or the Economic system of a country depends upon Political policies of that country. As the Government changes the Economic policies also change accordingly.

Political order cannot run without the assistance of economic order and the smooth running of economic order is not possible without the assistance of political order. The intimate affinity between political order and economic order comes into light when we study labour

legislations, tariff laws, trade, currency and exchange problems.

'The production and distribution of wealth', says Garner, "are to some extent determined by the existing forms of Government.' 'All economic activities are carried within the State on conditions laid down by the State laws and prevailing theories of state or government functions profoundly affect the economic life of a country.'Political movements are profoundly influenced by economic causes.'According to Professor Gilchrist, 'Economic life is conditioned by political institutions and ideas.'

Governments make policy changes in response to economic conditions. Government regulation of the economyis frequently used to engineer economic growth or prevent negative economic consequences. During periods of weak growth, economists recommend lowering interest rates to encourage borrowing and restore economic growth. In response to inflation concerns, Governments may decide to increase interest rates. Government policies may use tax incentives to direct economic conditions also. The active use of these strategies demonstrates Government interest in preserving particular economic circumstances to further the economic well- being of important stakeholders and the public.

Check Your Progress - 2

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. Charlyle said world history is a biography of great men. (True/False)
2. The word 'Economics' was derived from a Latin word. (True/False)
3. The objective of both Political Science & Economics is human welfare. (True/False)
4. Smith defined economics as the science of wealth. (True/False)
5. Are History and Geography are allied subjects. (True/False)

1.8 LET US SUM UP

Thus, we may conclude that the purpose of Social Science is to develop the social character of an individual into the community and making him aware off its collective life and ideals. We have come to know that Social Science are a group of academic disciples that examine society and how people interact and develop on a culture. The scope of Social Science includes study of human relations, study of man made institutions study of part based incidents, study of natural sciences andstudying of international relations. Study of Social Science is important to understand the society in which we live. Social Sciences comprises of History, Geography, Political Science and Economics and there is interrelationship among the core

subjects of Social Sciences.

1.9 LESSON END EXERCISE

1) Define Social Science.

2) What is the scope of Social Science?

3) Explain the importance of Social Science as school subject.

4) Write note on: (a) Relation between History and Geography. (b) Relation between Political Science and Economics.

1.10 SUGGESTED FURTHER READINGS

Bining, A.C. & Bining, D.H. (1982). Teaching the social studies in secondary schools. New York: McGraw-Hill

Dutta, S. & Garg, O.P. (2009). Teaching of Geography. Agra: Vinod Pustak Mandir

Khanna, R.K. (2008). Teaching of Political Science. Patiala: Twenty First Century Publication.

NCERT (2006). National Focus Group on Teaching of Social Sciences. Available at http://epathshala.nic.in/wp-content/doc/NCF/Pdf/ social_sciencel.pdf

Sharma, P. & Sharma, R. (2018). Relevance of life values in social-science. AGU International Journal of Research in Social Sciences & Humanities, 6, 53-9. Available at http://aguijrssh.com/images/ short_pdf/ 1516701407_VCET226SS.pdf

Singh, G. (2009). Teaching of Social Studies. Ludhiana: Chetna Parkashan

Singh, Y.Y. (2008). Teaching of Social Studies. New Delhi: A.P.H. Publishing Corporation

Verheggen, T. & Baerveldt, C. (2001). From shared representations to consensually coordinated actions in Theoretical Issues in Psychology. Available at https://www.researchgate.net/ publication/275552962

Yadav, N. (2003). Teaching of History. New Delhi: Anmol Publications Pvt. Ltd.

1.11 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1. : 1. (a), 2. (d), 3. (b), 4. (c), 5. (d)

Check Your Progress 2. : 1. True, 2. False, 3. True, 4. True, 5. True.

****

LESSON NO. 2 UNIT–I

AIMS AND VALUES OF TEACHING SOCIAL SCIENCE

2.0 STRUCTURE

2.1 Introduction

2.2 Objectives

2.3 Aims of Teaching Social Science

2.3.1 Kenworthy (1952)

2.3.2 Aims of Education given by the Secondary Education Commission (1952-53)

2.3.3 Aims of Education According to Indian Education Commission (Kothari Commission, 1964-66)

2.3.4 Aims Suggested by National Knowledge Commission (2005)

2.4 Values of Teaching Social Science

2.5 Let Us Sum Up

2.6 Lesson End Exercise

2.7 Suggested Further Readings

2.8 Answers to Check Your Progress

2.1 INTRODUCTION

So far we have discussed the concept of Social Science. Now, we will for our clear understanding must know what are the aims and values of teaching Social Science. Studying Social Science means to acquire more knowledge that helps us to know the mystery of the society and improve our interactions with each other, additionally the Social Science is the most important science in our life because human being is theelement who lives within a society which takes the great part in the Social Science. It is important to study Social Science because it is about what it means to be human. When we better understand ourselves, we can better understand how the world works. Once we understand that, we are able to identify root causes of society's problems and

find more effective solutions (Zafar, 2012).

2.2 OBJECTIVES

After going through this lesson, youshall beable to:

- describe the aims of teaching Social Science, and
- explain the value of Social Science asa school subject

2.3 AIMS OF TEACHING SOCIAL SCIENCE

Social science is included in the school curriculum. It is done to provide knowledge related to culture and civilization, to beget the education a democracy, to develop civil qualities, to develop social behaviour, to provide knowledge of social development, begetting a social knowledge, for all round development of personality, for development of the feeling of universal brotherhood, to show the significance of mutual dependence, to develop the power of reasoning and thinking, to develop ability to mould oneself according to the environment, to develop good habits and suitable proficiency, to socialize the child, to develop modernization, to develop social andmoral values.

2.3.1 Kenworthy (1952) has given following aims:

- The intelligent use of forces of nature.
- Recognition and understanding of world interdependence.
- Recognition of the dignity and worth of individual
- The use of intelligence to improve human living.
- The vitalization of democracythrough an intelligent use of our public education facilities.
- The intelligent acceptance, by individuals and groups, of responsibility forachieving democratic social action.
- Increasing the effectiveness of the family as a basic social institution.
- The effective development of moral and spiritual values.
- The intelligent and responsible sharing of power in order to attain justice.
- The intelligent utilization of scarce resources to attain the widest general well- being.
- Achievement of adequate horizons of loyalty.

- Cooperation in the interest of peace and welfare.
- Achieving a balance between social stability and social change.
- Widening and deepening the ability to live more richly.

2.3.2 Aims of Education given by the Secondary Education Commission (1952- 53):

- Developing Democratic Citizenship: According to Secondary Education Commission, the aim of education is to develop democratic citizenship, independent judgment, clear thinking, clearness in speech and writing, sense of true patriotism and sense of world citizenship must be developed among the students.
- Development of Vocational Efficiency: For national prosperity and economic development, vocational efficiency must be developed among the students. Development of vocational efficiency helps in preparing students for vocational self-dependence and thus helps in solving the problem of unemployment.
- Education for Leadership: Aim of education is also to develop the qualities of good leadership. The success of democracy depends upon good, efficient and responsible leadership.
- Development of Personality: Commission has included all-round development of personality of child as an important aim of education. All the aspects of the personality of child must be developed.

2.3.3 Aims of Education According to Indian Education Commission (Kothari Commission, 1964-66): The aims of education as suggested by Kothari Commission are given below:

(1) Increasing Productivity: Education in India should aim at increasing productivity. Curriculum must include:

(a) Science education.

(b) Work experience

(c) Emphasis on technology and industrialization.

(d) Vocationalization.

(2) Achieving Social and National Integration: According to Kothari Commission, national integration is an important aim of education. Following steps have been suggested for

the achievement of this aim:

(a) Common school system throughout the nation.

(b) Social and national service.

(c) Suitable language policy.

(d) Promotion of national consciousness.

(3) Accelerating the Process of Modernization: Education has to play important role in the scientific and technical development of India. Education can help India to keep pace with the scientific and technical development of the world. Education should familiarize the students with the changing world and different aspects of modernization.

(4) Cultivating Social, Moral and Spiritual Values: Ethical and moral development are equally important for the society. Values are the base of society. Cultivation of social, moral and spiritual values among students will help in making the future society free form social evils.

Aims of Education as Outlined by the Ishwar Bhai Patel Committee Report(1977):

(1) Promoting, understanding and appreciating our cultural heritage and making desirable changes in it.

(2) Developing the child in the image of a citizen as visualized in the constitution.

(3) Socially Useful Productive Work (S.U.P.W.) in accordance with the economic situation must be included in the curriculum.

(4) Encouraging rational and the scientific attitude.

(5) Encouraging the qualities of simplicity, integrity, tolerance and co-operation in all aspects of life.

(6) Education should be available to every individual irrespective of caste, colour or creed.

Aims of Education as Suggested by National Policy on Education (1986):

(1) Removal of Unemployment: Our education system should be such that it does not push people into demanding white collar employment but gives them initiative towards self-employment. It should give them a spirit of self-help.

(2) Social Equality and National Integration: Aim of education should be to promote social equality and national integration.

(3) Manpower Planning: Another aim of education should be human resource development

and manpower planning.

(4) Education According to Individual Need and Capabilities: Next aim of education should be to educate individuals according to their needs and capabilities.

(5) Equalization of Educational Opportunities: Equal opportunities of education irrespective to caste, colour, sex or place of birth.

(6) Inculcation of Values and Cultural Traditions: Other aim of education is to inculcate traditional and modern values and to impart knowledge of cultural traditions.

(7) Future Oriented Education: Education must be future oriented. Students must be prepared for future by developing their independent and logical thinking.

2.3.4 Aims Suggested by National Knowledge Commission (2005):

(1) Youth must be able to realize their full potential in the global economy.

(2) Opportunities for all sections of society including women, children rural communities, urban slums, tribal groups and other economically and socially disadvantaged communities and help in moving towards more equitable society.

(3) Developing a resource of skilled manpower, a favourable eco-system for entrepreneurship and innovation, research and development, and an efficient system of delivery of public services.

(4) Teaching of English should be introduced, along with first language, (either mother tongue or the regional language) of the child, starting from class I.

(5) Technology should be used for teaching and more importance must be given to understanding of the concepts.

Check Your Progress - 1

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

Multiple Choice Questions

1. Aim of teaching Social Science at school is to develop

(a) Democratic Citizenship (b) Leadership

(c) Personality (d) All of the above

2. According to Kothari Commission _____ is an important aim of Education.

(a) National Integration (b) National Disintegration

(c) National Service (d) Spiritualisation

3. Youth must be able to realize their full potential in the global economy was the aim suggested by

(a) National Knowledge Commission (b) Kothari Commission

(c) NPE policy on Education (d) Indian Education Commission

4. Social Science provides knowledge about

(a) Culture and Civilization (b) Political Culture

(c) Material Culture (d) Regional Culture

5. National Policy on Education should be _____ oriented

(a) Thought (b) Future

(c) Work (d) None of the above

2.4 VALUES OF TEACHING SOCIAL SCIENCE

Aims and values are two different terms which are used in Education. Values are the outcome or the results achieved after teaching according to the aim. Aims are ideals whereas values spring after putting the aims into practice, aims are based on Philosophy whereas values are based on reality. We can say that the aims are the desired goals and values are expected outcomes.

Social Science as a school subject in India provides social learning, knowledge with experience, competence in tackling problems, and training in co-operation. It also helps for the slow and the backward learners, and skill in selection of vocation. It can help us to improve our societies.

Teaching of Social Science in schools helps us to improve the understanding of our lives. It helps us to improve our interactions with each other. It helps us to provide training in good

behaviour. It helps us to develop human qualities, good habits and suitable proficiency in students.

Following are the values of teaching Social Science in schools:

a) Disciplinary Value: Social Science provides mental training to the students. As a part of Social Science education the child gets mental training in comparison and contrast, in examining data and concluding, in examining the evidence and connecting cause and effect, in understanding the environment, in understanding the political structure, in understanding the market.

b) Information Value: Social Science provides valuable information to students about political and social life, about economic development, about historical aspects, and about art, language, literature and Philosophy.

c) Educational Value: Social Science helps in giving proper understanding of social, physical, and political environment to the students. Students also become familiar with the History and economy. Social Science also makes it possible for the students to have understanding of science and mathematics.

d) Ethical Value: Social Science helps in inculcating moral and ethical values among the students. It teaches morality. It makes the student familiar with moral laws of right and wrong.

e) Cultural Value: Social Science is an effective instrument of civilizing human mind. It develops tolerance, fellow feeling, co-operation among the students. Social Science helps in developing the values of truth, beauty and goodness among Indian students.

f) Political Value: Social Science as a school subject makes the students aware about their social and political rights and responsibilities. It helps in developing qualities of responsible democratic citizenship among the students.

g) Nationalistic Value: Social Science helps in developing unity in diversity among Indian students. It develops feeling of patriotism among the students.

h) Internationalist Value: Social Science as a school subject makes the students familiar with the dependence and interdependence of nations. It develops the idea of world citizenship.

i) Vocational Value: Social Science as a discipline has vocational value. Students of Social Science have scope in the field of teaching in schools, colleges, and universities. They can also go for jobs in different other fields- journalism, politics, social service, defense,

administration and many more.

Check Your Progress - 2

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. Aims are the desired goals and values are expected outcomes. (True/False)
2. Teaching of Social Science in school helps an individual to improve the understanding of human lives. (True/False)
3. Social Science is an effective instrument of Civilizing human mind. (True/False)
4. Social Science does not develop sense of unity in diversity. (True/False)
5. Social Science as a discipline has vocational value. (True/False)

2.5 LET US SUM UP

Thus, from the above discussion we can conclude that a good and useful individual life, an ideal society and a perfect state well emerge if Social Science istaught with these aims in view. At this stage, to relate ideas to meaningful concept and then to make generalisations.

2.6 LESSON END EXERCISE

1) What are the aims of teaching Social Science in Indian schools?

2) Discuss the value of Social Science as a school subject.

3) Discuss in brief what are the aims of education given by secondary education commission (1952-53)

4) Elaborate the aims of Kothari Commission

5) Give in detail aims of education suggested by National Policy of Education(1986).

2.7 SUGGESTED FURTHER READINGS

Dutta, S., & Garg, O.P. (2009). Teaching of Geography. Agra: Vinod Pustak Mandir

Kenworthy, L.S. (1952). Guide to social studies teaching. New Delhi: Wadsworth Publishing Company.

Khanna, R.K. (2008). Teaching of Political Science. Patiala: Twenty First Century Publication.

Pathak, R.P. (2010). Teaching of Social Studies. New Delhi: Atlantic Publishers.

Singh, G. (2009). Teaching of Social Studies. Ludhiana: Chetna Parkashan.

Yadav, N. (2003). Teaching of History. New Delhi: Anmol Publications Pvt. Ltd.

Zafar, M.K.M. (2012). Social Sciences scope and importance. Available at https://www.slideshare.net/mkmzafar/social-sciences-scope-and-importance

2.8 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1 : 1. (a), 2. (a), 3. (a), 4. (a), 5. (b)

Check Your Progress 2 : 1. True, 2. True, 3. True, 4. False, 5. True

****

LESSON NO. 3 UNIT–I

BEHAVIOURAL OBJECTIVES

3.0 STRUCTURE

3.1 Introduction

3.2 Objectives

3.3 Meaning of Behavioural Objectives

3.3.1 Main Points about Behavioral Objectives

3.3.2 According to NCERT (2006)

3.4 Importance of Behavioural Objectives

3.5 Steps for Preparing Behavioural Objectives of Social Science

3.5.1 According to Meyers (2014)

3.5.2 Robert (2009)

3.5.3 According to Kizlik (2018)

3.5.4 The Original Bloom's Taxonomy (1956)

3.5.5 The Revised Bloom's Taxonomy (2001)

3.6 Let Us Sum Up

3.7 Lesson End Exercise

3.8 Suggested Further Readings

3.9 Answers to Check Your Progress

3.1 INTRODUCTION

In the previous two lessons, we well discussed and tried to understand the meaning and scope of Social Science along with its aims and values. Now in this

lesson, we will be discussing about how aims and objectives are of pivotal importance in planning educational experiences. Objectives serve as guides in planning, delivering, and evaluating the instructions. They help learners to know what is expected of them and help them prioritize the content. They provide a template for tests and other evaluation tools.

3.2 OBJECTIVES

After going through this lesson, you shall be able to:

- give the meaning of behavioural objectives,
- explain the importance of behavioural objectives, and
- discuss the steps for preparing behavioural objectives.

3.3 MEANING OF BEHAVIOURAL OBJECTIVES

A behavioral objective is a learning outcome stated in measurable terms, which gives direction to the learner's experience and becomes the basis for student evaluation. A behavioral objective is student-oriented. It emphasizes upon what the student is expected to do after the completion of the particular lesson.

Bloom (1956) defined behavioural objective as 'Explicit formulations of ways in which students are expected to be changed by the educative process.' Mager (1962) defined behavioural objective as 'What the students should be able to do at the end of a learning period that they could not do beforehand.' Mager (1975) defined behavioural objective as 'An objective is a description of a performance you want learners to be able to exhibit before you consider them competent. An objective describes an intended result of instruction, rather than the process of instruction itself.'

Sulzer-Azaroff and Mayer (1977) define a behavioral objectives as 'a precisely specified goal, stated so that three essential elements are made clear; the desired response, with all its essential properties, or behavioral dimensions; the situation in which the response is to occur, including setting, materials, personnel, and so on; and the criteria for determining when the objective has been accomplished.'

Obed (1987) stated that behavioural objectives are learning objectives, they specify what behaviour a student must demonstrate or perform in order for a teacher to infer that learning has taken place.

Properly constructed education objectives represent relatively specific statements about what students should be able to do following instruction (Gallagher & Smith, 1989).

According to Huitt (2002) an objective is a clear and unambiguous description of your educational expectations for students. When written in behavioral terms, an objective will include three components: student behavior, conditions of performance, and performance criteria.

Behavioral objectives that are useful in the classroom must meet certain criteria. The four essential elements of a well-written behavioral objective are outlined below. When writing a behavioral objective, evaluate it using these criteria. (a) Good behavioral objectives are student-oriented. (b) Good behavioral objectives describe learning outcomes. (c) Good behavioral objectives are clear and understandable.
(d) Good behavioral objectives are observable.

3.3.1 Main Points about Behavioral Objectives: A statement is a behavioral objective if it meets the following conditions.

a) A behavioral objective describes what the trainee should be able to do at the end of the training.

b) A behavioral objective contains an action verb describing observable, measurable behavior.

c) In a behavioral objective, the trainee is the subject of the sentence (Rodgers & Spink, 1983).

3.3.2 According to NCERT (2006) objectives of teaching Social Science in Indian schools are:

- Understand the processes of economic and social change and development with examples from modern and contemporary India and other parts of the world.
- Critically examine social and economic issues and challenges like poverty, child labour, destitution, illiteracy, and various other dimensions of inequality.
- Understand the rights and responsibilities of citizens in a democratic and secular society.
- Understand the roles and responsibilities of the state in the fulfillment of constitutional obligations.
- Understand the processes of change and development in India in relation to the world

economy and polity.

- Appreciate the rights of local communities in relation to their environment, the judicious utilization of resources, as well as the need for the conservation of the natural environment.

3.4 IMPORTANCE OF BEHAVIOURAL OBJECTIVES

According to Vargas (1972) Objectives perform the following three functions:

- Objectives Communicate Expectations to the Student: A student should have a clear understanding of what the teacher plans to teach. This helps the student study and practice the right material, and can lead to better communication between the student and teacher. It also helps the student evaluate in the first place if it is even a good idea to take a certain class. In school settings, it is also often important for parents, administrators, and others to have a clear idea of the objectives for a class.
- Objectives Give a Standard for Measuring Progress. Precise objectives help the teacher know what a student should be able to do at the end of a class or a course – what exact behaviors or skills should now be part of the student's repertoire. This knowledge can be used to design appropriate assessments to determine if the student has actually achieved what the teacher was trying to teach.
- Objectives help a Teacher Design Optimal Learning Experiences. Knowing what the behavior will need to look like, when and where it will need to be performed, and to what precision, or criteria, it will need to be performed will influence how you go about teaching the behavior and will influence which types of practice and activities will be most meaningful for the learner.

Check Your Progress - 1

Note : (a) Answer the questions given below.

(b) Compare your answer with those given at the end of the lesson.

1. _____ stated that behavioural objectives are learning objectives.
2. According to _____ an objective is a clear description of your educational expectations for students.
3. A _____ objective contains an action verb discribing observable, measurable behaviour.
4. According to _____ Social Science helps to understand the rights and responsibilities of citizen in a democratic and secular society.
5. According to _____ in a behavioural objective, the trainee is the subject of the sentence.

3.5 STEPS FOR PREPARING BEHAVIOURAL OBJECTIVES OF SOCIAL SCIENCE

There are a number of approaches to writing instructional objectives.

Mager (1997) proposed writing very specific statements about observable outcomes (called behavioural objectives) that include descriptions of the behaviour to be demonstrated, the conditions under which the behaviour will be demonstrated, and the criteria for demonstration of mastery performance. Mager suggested objectives can be built up to become a curriculum (an inductive approach). Gronlund (1999) proposed starting with a general statement and then providing specific examples of topics to be covered or behaviors to be observed (a deductive approach). He does not advocate inclusion of the conditions and criteria in the statement. Eisner (1997) proposed that not all instructional objectives should focus on outcome; some should focus on the learning process itself (expressive objectives).

3.5.1 According to Meyers (2014) 5 steps to write effective learning objectives are:

(i) Decide on the Type of Change: Before one begin to write an objective, it is important to identify what type of change he wants his training to make. In other words, what does he want his participants to do differently when they return to work? There are three different learning domains that one can focus on a different type of change. Deciding what domain of learning he wants to focus on will make it easier to construct his objectives. The three domains are:

a) Attitude (Known as the Affective Domain)- Changes how a learner chooses to act. Compliance training is a good example of when he will have to teach to this domain. It's

usually the hardest to craft objectives for this domain.

b) Skills (Known as the Psychomotor Domain) - This domain focuses on changing or improving the tasks a learner can perform.

c) Knowledge (Known as the Cognitive Domain) - This domain focuses on increasing what participants know. Leadership training would be a good example of this domain.

(ii) Get Some Action Verbs: Now that he has identified what domain he intends to focus on for his objective, it is time to start crafting one's very own objective. Todo that, it will help to have a group of action verbs. A list of action verbs that are separated bydomain:

Attitude					
Advocate	Analyze	Choose	Convince	Endorse	Select
Accept	Approve	Collaborate	Cooperate	Evaluate	Support
Agree	Assess	Comply	Decide To	Pick	Tolerate
Allow	Believe	Conform	Defend	Recommend	Volunteer
Knowledge					
Compare	Discover	Itemize	Recite	Retell	Tell
Define	Distinguish	Label	Recognize	Specify	Term
Describe	Explain	List	Recount	Spell Out	Write
Designate	Identify	Name	Relate	State	
Skills					
Actuate	Assemble	Demonstrate	Form	Perform	Remove
Adjust	Build	Design	Handle	Prepare	Repair
Administer	Calibrate	Develop	Manipulate	Process	Replace
Align	Change	Draft	Measure	Record	Set
Alter	Copy	Execute	Mend	Regulate	Service

(iii) Create one's Very Own Objective: Give it a try!

(iv) Check one's Objective: To ensure his objectives are iron clad, The Bob Pike Group makes sure that each one includes four pieces: audience, behavior, condition and degree of mastery. For every objective, we identify and label each component, carefully scrutinizing its effectiveness. Here are the four pieces that every objective should contain.

a) Audience. It is important that one's objective identifies the people that will be doing the learning. Typicallythis will involve the word, "learner" or "participant."

b) Behavior. He needs to identify what the participants are going to do differently.

This component will contain one's action verb.

c) Condition. This part of the objective will describe the situation of the participants.

d) Degree of Mastery. This part of the objective is closely tied to the change in behavior, as it stipulates the degree of the change.

(v) Repeat: The process has to be repeated for each objective. The process continues until one feel that he has enough objectives to effectively measure his performance. Remember, objectives work as checkpoints that lead to a completion of a goal. It is important that one has enough of them to keep oneself from getting lost.

3.5.2 Robert (2009) suggested that the following behavioural verbs can serve as guide when constructing statement of behavioural objectives:

(i) Knowledge : Cite, label name, reproduce, define, list, tell, recall, remember, repeat, quote, pronounce, identify, recognize, describe, memorize, locate, draw, write, select, match, recite, state,

(ii) Comprehension : Examples, represent, summarize, depict, restate, interpret

,infer, match, substitute, convert, give, express, defend, predict, distinguish, compare, extend, paraphrase, transform, review, generalize, translate, describe, illustrate, reword, vary, , discover, manage, relate, change, explain, alter, rephrase,

(iii) Application : Apply, discover, manage, relate, classify, employ, demonstrate, manifest, utilize, make, solve, produce, predict, direct, practice, use, illustrate, report, change, present, modify, sketch, show, compute, evidence, prepare, choose, interpret, draw, model, paint, dramatize, collect,

(iv) Analysis : Ascertain, diagnose, distinguish, outline, analyze, diagram, divide, reduce, associate, examine, separate, conclude ,discriminate, find ,determine

, designate, dissect, infer, separate, categorize, classify, construct, differentiate, investigate, compare, contrast, survey, organize, research, subdivide, pointout,

(v) Synthesis : Conceive, play, formulate, organize, modify, construct, imagine, produce, generalize, propose, theorize, combine, devise, originate, revise, compile, expand, plan, rewrite, compose, extend, pose, synthesize, create, integrate, project, write, design, invent, rearrange, develop, hypothesize, add to, role

(vi) Evaluation : Recommend, solve, summarize, assess, contrast, appraise, conclude, critique, judge deduce, select, justify, debate, verify, consider, weigh, relate, compare, criticize,

evaluate, decide,

3.5.3 According to Kizlik (2018) the following verbs and their definitions can be helpful when composing learning objectives:

(i) To Apply a Rule: To state a rule as it applies to a situation, object orevent that is being analyzed.

(ii) To Assess: To stipulate the conditions by which the behavior specified in an objective may be ascertained.

(iii) To Classify: To place objects, words, or situations into categoriesaccording to defined criteria for each category.

(iv) To Compose: To formulate a composition in written, spoken, musicalor artistic form.

(v) To Construct: To make a drawing, structure, or model that identifies adesignated object or set of conditions.

(vi) To Define: To stipulate the requirements for inclusion of an object, word, or situation in a category or class.

(vii) To Demonstrate: The student performs the operations necessary for the application of an instrument, model, device, or implement.

(viii) To Describe: To name all of the necessary categories of objects, object properties, or event properties that are relevant to the description of adesignated situation.

(ix) To Construct a Diagram: To construct a drawing with labels and with a specified organization or structure to demonstrate knowledge of that organization or structure.

(x) To Distinguish: to identify under conditions when only two contrasting identifications are involved for each response.

(xi) To Estimate: to assess the dimension of an object, series of objects, event or condition without applying a standard scale or measuring device.

(xii) To Evaluate: to classify objects, situations, people, conditions, etc., according to defined criteria of quality.

(xiii) To Identify: to indicate the selection of an object of a class in response to its class name, by pointing, picking up, underlining, marking, or other responses.

(xiv) To Interpret: to translate information from observation, charts, tables, graphs, and written material in a verifiable manner.

(xv) To Label: To stipulate a verbal (oral or written) response to a given object, drawing, or composition that contains information relative to the known, but unspecified structure of these objects, drawings, or compositions

(xvi) To Locate: To stipulate the position of an object, place, or event in relation to other specified objects, places, or events.

(xvii) To Measure: To apply a standard scale or measuring device to an object, series of objects, events, or conditions, according to practices accepted by those who are skilled in the use of the device or scale.

(xviii) To Name: To supply the correct name, in oral or written form for an object, class of objects, persons, places, conditions, or events which are pointed out or described.

(xix) To Order: To arrange two or more objects or events in accordance with stated criteria.

(xx) To Predict: to use a rule or principle to predict an outcome or to infer some consequence

(xxi) To Reproduce: to imitate or copy an action, construction, or object that is presented.

(xxii) To Solve: to effect a solution to a given problem, in writing or orally. The problem solution must contain all the elements required for the requested solution, and may contain extraneous elements that are not required for solution.

(xxiii) To State a rule: to make a statement that conveys the meaning of the rule, theory or principle.

(xxiv) To Translate: to transcribe one symbolic form to another of the same or similar meaning.

3.5.4 The Original Bloom's Taxonomy (1956): The original Bloom's Taxonomy include:

(i) Knowledge "involves the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting."

(ii) Comprehension "refers to a type of understanding or apprehension such that the individual knows what is being communicated and can make use of the material or idea being communicated without necessarily relating it to other material or seeing its

fullest implications."

(iii) Application refers to the "use of abstractions in particular and concretesituations."

(iv) Analysis represents the "breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas ismade clear and/or the relations between ideas expressed are made explicit."

(v) Synthesis involves the "putting together of elements and parts so as toform a whole."

(vi) Evaluation engenders "judgments about the value of material and methodsfor given purposes."

3.5.5 The Revised Bloom's Taxonomy (2001): Revised Bloom's Taxonomy include:

(i) Remember

a. Recognizing

b. Recalling

(ii) Understand

a. Interpreting

b. Exemplifying

c. Classifying

d. Summarizing

e. Inferring

f. Comparing

g. Explaining

(iii) Apply

a. Executing

b. Implementing

(iv) Analyze

a. Differentiating

b. Organizing

c. Attributing

(v) Evaluate

a. Checking

b. Critiquing

(vi)Create

a. Generating

b. Planning

c. Producing

In the revised taxonomy, knowledge is at the basis of these six cognitive processes:

(i) Factual Knowledge

a. Knowledge of terminology

b. Knowledge of specific details and elements

(ii) Conceptual Knowledge

a. Knowledge of classifications and categories

b. Knowledge of principles and generalizations

c. Knowledge of theories, models, and structures

(iii)Procedural Knowledge

a. Knowledge of subject-specific skills and algorithms

b. Knowledge of subject-specific techniques and methods

c. Knowledge of criteria for determining when to use appropriate procedures

(iv)Metacognitive Knowledge

a. Strategic Knowledge

b. Knowledge about cognitive tasks, including appropriate contextual and conditional knowledge

c. Self-knowledge

Check Your Progress - 2

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. Mager suggested objectives can be built up to became a curriculum. (True/False)

2. 5 steps to write on effective learning objectives has been given by Meyers. (True/False)

3. The original Bloom's Taxonomy was given in 1956. (True/False)

4. Synthesis involves the putting together of elements and parts so as to form a whole. (True/False)

5. Evaluation engenders Judgements about the value of material and methods for given purposes. (True/False)

3.6 LET US SUM UP

Thus, we may from the above discussion conclude that behavioural objectives is a learning outcome and it is student oriented. It helps teacher in fixing definite standards of measuring the progress of student and helps in bringing learning experiences among the students.

3.7 LESSON END EXERCISE

a) What is meant by behavioural objectives?

b) Explain the importance of behavioural objectives.

c) Discuss the steps for preparing behavioural objectives.

d) Discuss the Bloom's Taxonomy of behavioural objectives.

3.8 SUGGESTED FURTHER READINGS

Anderson, L., & Krathwohl, D. A. (2001). Taxonomy for learning, teaching and assessing: A revision of Bloom's Taxonomy of Educational Objectives. New York: Longman.

Bloom, B.S. (Ed). (1956). Taxonomy of Educational Objectives: The Classification of Educational Goals, handbook 1: Cognitive Domain. NewYork: McKay.

Bloom, B.S., Engelhart, M.D., Furst, E.J., Hill, W.H., Krathwohl, D.R. (1956). Taxonomy of

educational objectives: The classification of educational goals. Handbook I: Cognitive domain. New York: David McKay Company.

Dutta, S. & Garg, O.P. (2009). Teaching of Geography. Agra: Vinod Pustak Mandir

Gallagher, R.E. & Smith, D.U. (1989). Formulation of Teaching/Learning Objectives Useful for the Development and Assessment of Lessons, Courses, and Programs. Journal of Cancer Education, 4(4), 231-234.

Huitt, W. (2002). Writing instructional objectives. Educational Psychology Interactive. Valdosta, GA: Valdosta State University. Retrieved [date] from

Khanna, R.K. (2008). Teaching of Political Science. Patiala: Twenty First Century Publication.

Kizlik, B. (2018). Definitions of behavioral verbs for learning objectives. Available at http://www.adprima.com/verbs.htm

Mager, R, (1962). Preparing instructional objectives. Palo Alto, CA: Fearon Publishers.

Mager, R. (1975). Preparing instructional objectives (2nd Ed.). Belmont, CA: Fearon-Pitman Publishers, Inc.

Meyers, J. (2014). 5 steps to write effective learning objectives. Available at https://www.bobpikegroup.com/objectives2

NCERT (2006). National Focus Group on Teaching of Social Sciences. Available at http://epathshala. nic.in/wp-content/doc/NCF/Pdf/ social_sciencel.pdf

Robert, K. (2009). How to write behavioral objectives. Available at http:// www.nhlbi.nih.gov/funding/training/naa/curr_gde/index.htm

Rodgers, Y. & Spink, L. (1983). A Trainer's Resource Guide. Available at http://www.nzdl.org/gsdlmod?e

Yadav, N. (2003). Teaching of History. New Delhi: Anmol Publications Pvt. Ltd.

3.9 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1 : 1. (obed), 2. (Hwitt), 3. (Behavioural), 4. (NCERT), 5. (Rodgers & Spink).

Check Your Progress 2 : 1. True, 2. True, 3. True, 4. True, 5. True.

LESSON : 4 UNIT - II

CURRICULUM

4.0 STRUCTURE

4.1 Introduction

4.2 Objectives

4.3 Meaning of Curriculum

4.4 Importance of Curriculum

4.5 Principles of Curriculum Formation

4.6 Let Us Sum Up

4.7 Lesson End Exercise

4.8 Suggested Further Readings

4.9 Answer to Check Your Progress

4.1 INTRODUCTION

According to modern concept, curriculum is the sum total of experiences, activities or the realities of life. In this respect, there is the assemblage of situations in which the child participates and faces them. We can say that curriculum is much more than the text-books, subject-matter and courses of study. 'Curriculum' is the term which is derived from the Latin word currere which means to run. So, curriculum means the 'road on which a person runs to reach some goal.' From this angle, 'education' is a race which makes one to run on the path of curriculum and through this the aim of the development of the personality of the child is reached.

The development of curriculum in social studies is a complex and intricate process. Since the scope of the subject is very vast, so whatever, is to be taught, must be selected carefully, the curriculum should be developed in such a way that it helps the students to develop major ideas, skills, attitudes and habits conducive to good citizenship education.

4.2 OBJECTIVES

After going through this lesson, you shall be able to :

- explain the meaning and concept of the term Curriculum,
- discuss the importance of good Curriculum at elementary and secondary level, and
- explain underlying principles of designing.

4.3 MEANING OF CURRICULUM

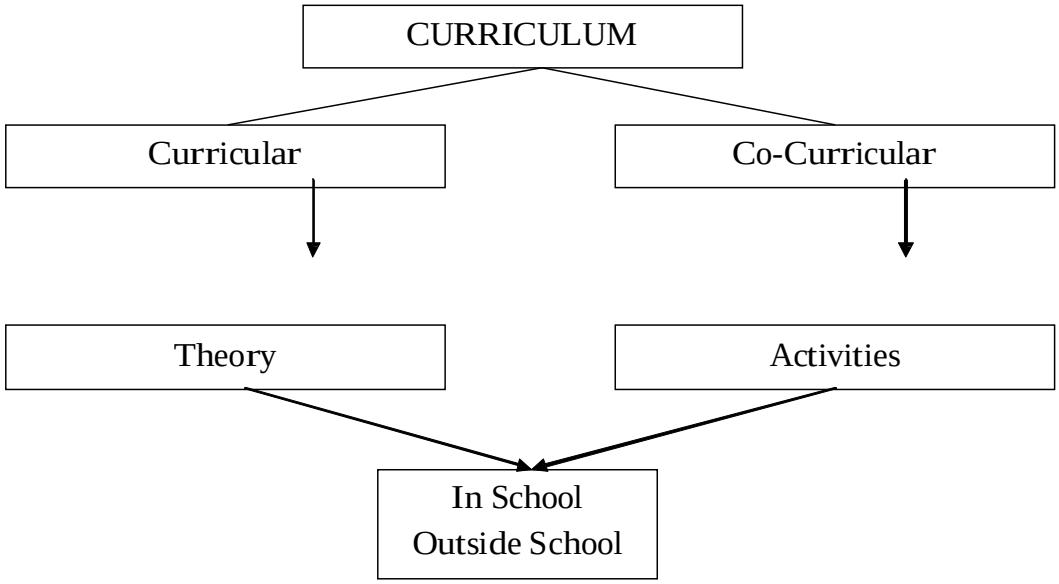
Normally by curriculum we understand that subject matter which is taught under different subjects. But this concept of curriculum is narrow and limited. The concept of curriculum refers to the totality of experiences that a child receives through various classroom activities as also from activities in library, laboratory, workshop, assembly hall, play fields etc. Thus according to modern concept curriculum includes the whole like of the school. Those activities which were previously referred to as co-curriculum activities have now become curricular activities.

According to this concept the curriculum can be considered to include the subject matter, various co-curricular activities etc.

Curriculum is derived from the Latin word "Currere" meaning "a course to run." Thus curriculum is an "organized plan of course-outlines along with objectives and learning experience."

According to Crow and Crow, "Curriculum includes all the learner's experiences, in or outside school that are included in a program which has been devised to help him to develop mentally, physically, emotionally, socially, spiritually and morally."

J.F. Ker defines curriculum as, "All the learning which is planned and guided by the school, whether it is carried on in groups or individually, inside or outsidethe school."



4.4 IMPORTANCE OF CURRICULUM

Curriculum is an important tool in the hands of social studies teacher to teach his goal. William b. Rogan has commented, "The course of study has the same relationship to the curriculum that a road map has to be actual experiences involved in taking a trip."

William J. Bennet says, "If the teacher is the guide, the curriculum is the path. A good curriculum marks the points of significance so that the student doesnot wonder aimlessly over the terrain, dependent solely on chance to discover the landmarks of human achievements."

These comments show how curriculum is an important tool to equip a learner to realize his potential and contribute his mite to the advantage of mankind.

Every society and nation has its own values, assumptions and needs for the fulfilment of which education is imparted and the goals are fixed for the same. Knowledge of those subjects and training in activities which are deemed necessary

for the fulfillment of these goals are given proper place in the curriculum. So, for planned education, curriculum is a must. We see the importance of the same as under :

1. Education Process becomes Systematic : Curriculum decides teaching material. With the help of this, it is made clear what knowledge of subjects and how much efficiency in activities be got and at what level of education. Thus, a precise curriculum makes educational activities systematic, clear and specific.

2. Satisfaction of Psychological Needs of Children : A definite curriculum helps in satisfying the psychological needs of the pupils. Man is such an animal who takes interest in purposeful activities which satisfy his present needs and prospects improve for the satisfactionn of his future needs. Curriculum is framed keeping these three things in mind, and so the children take interest in carrying it out.

3. Best use of Time and Energy : When the scope of the curriculum is deemed, the teacher comes to know what he has to teach and pupils know what they have to learn. It help in making a good use of time and energy.

4. Helps in Writing Text-books Written : A definite curriculum directs various writers to write bookss. While preparing the text-books the writer includes only necessary and relevant material.

5. Uniform Level of Education : A definite curriculum keeps the level of education of society uniform. Their outcome, offer uss correct direction for reform in education. A definite curriculum offers facilities in keeping the level of education uniform.

6. Evaluation : It becomes easy to evaluate children with the help of the curriculum. For a specific level, after the curriculum is framed, it becomes easier tto evaluate the pupils. If there is no curriculum for a particular level, then how the teacher will evaluate the abilities of the pupils.

7. Achievements of Aims of Education : Curriculum is framed for achieving the goals of education. If there is no definite curriculum before us we cannot know through what knowledge of subjects and training of activities, we are achieving the goals and which activities are useful and which are not.

Check Your Progress -1

Note: (a) Answer the questions given below.

(b) Compare your answer with those given at the end of the lesson.

1. Curriculum is an important factor of education programme. (True/False)
2. There is no difference between curriculum and courses of study. (True/False)
3. Curriculum includes physical, social and academic environment of school. (True/False)
4. Curriculum development is a dynamic process of education.(True/False)
5. Curriculum is a cyclic process in education. (True/False)

4.5 PRINCIPLES OF DESIGINING A GOOD CURRICULUM FOR SOCIAL SCIENCE

There are certain principles o£ curriculum planning which should form the basis for formation of good curriculum. Some of these are:

(i) The principle of child centeredness. The curriculum should be based on the present needs and circumstances of the child. While framing syllabus of social studies for any class due attention should be given to the child's activities, capacities, likings etc. The material should be functional and not scholar tokeep social studies learning as life like.

(ii) Curriculum should provide a fullness of experience for children.

(iii) The curriculum should be dynamic and not static.

(iv) It should be related to everyday life.

(v) It must take into account the economic aspects of life of the people towhom an educational institution belongs.

(vi) The curriculum should be realistic and rationalistic.

(vii) While framing the curriculum a balance is struck between the educationof nature and education of man.

(viii) It should lay emphasis on learning to live rather than on living to learn.

(ix) In curriculum such activities must be included which help in preserving and transmitting the traditional knowledge and standards of conduct on which our civilization depends.

(x) It should be elastic and flexible. The social studies teacher is expected to use the prescribed course as a guide only. He has every right to introduce flexibility in is teaching-learning process to reduce boredom, if any. The social science teacher should be creative and resourceful to make adjustments in his lessons so as to make them receptive for his students.

(xi) It should be well integrated. By integration we mean that "Activities carried on in school should not be treated in water tight compartments, but should be so conducted as to lead the "whole child" to a functional unity with the environment." No service will be done to the enrichment of social studies curriculum if different topics are not treated as a whole to explain in detail the background of various social, economic, political and religious activities taking place.

We have to always remember that "The history of human race is the history of growth" and this growth cannot be presented in parts.

(xii) It should provide both for uniformity and variety.

(xiii) It should be able to serve the needs of the community. It is well said, "Curriculum to be effective, should be community centered. The child is anheir to the society in which he is born, he therefore cannot be educated in vacuum. The good of the individual child and the good of the community cannot be separated."

(xiv) It should be experience based. The aim of social studies is not only to give knowledge to children but also to develop their social skills, attitudes and interests which help them in their social adjustment; making them useful citizens.

Therefore the curriculum should include such activities which provide experiences to children in social situations.

(xv) Functional relationship among subjects. Social studies draws its material from history geography, civics and economics, hence the practical aspects of all these subjects be kept in mind while framing the curriculum for social studies.

(xvi) Well knit in sequence. Every lesson should lead to the next lesson and contentmatter of one class should form the basis for the content matter of the next class. It will help in making social studies an independent subject and facilitate better learning.

(xvii) Forward looking.

(xviii) Not final buttentative.

Check Your Progress- 2

Note:(a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. The curriculum word is of __ language.
2. Curriculum development is a _ _ process.
3. There are _ _ components of curriculum development.
4. Basic elements of curriculum development are objectives, content, Instructional method and _
5. The type of curriculum in our education system is __ _ centered.

4.6 LET US SUM UP

We may conclude that by following certain basic principles of curriculum construction in social studies, it is possible to fulfill the objectives or goals of the Thomas Hopkins observes, "Correlation (curriculum) means the teaching andlearning of essential parts of the context of the subjects or broad fields which have observable relation to a common topic or item. It is a method of unifying subject matter, butit does not necessarily present any change.

4.7 LESSON END EXERCISE

Short Answer Type Questions

1. What do you mean by the term curriculum?
2. Enumerate the characteristics of curriculum.

3. Indicate the main objective of curriculum development.

4. Explain the major type of curriculum.

5. Enumerate the factor effecting curriculum development.

Essay Type Questions

1. Illustrate the meaning of curriculum with special reference to characteristics of curriculum.

2. Enumerate the objectives of curriculum and indicate its basic elements and their roles.

3. Indicate the need and importance of curriculum.

4. Give the type of curriculum and indicate the defects of present curriculum.

5. Indicate the principles of curriculum development in Indian democracy.

4.8 SUGGESTED FURTHER READINGS

Jha, S. A. (2011). Teaching of Social Science. New Delhi: APH, Publishing Corporation.

Sharma, R.A. (2004). Teaching of Social Science. Meerut :Surya Publication.

Sharma, R.K. (2008). Teaching of Social Science. New Delhi: Lotus Press. www.lotuspress.co.in

Sharma, P. S. (2011). Teaching of Social Science (Principles, Approaches and Practices. New Delhi: Kanishka Publishers, Distributors, kanishka_publishing@yahoo.co.in

Ruhela, S.P.(2019). Teaching of Social Science. New Delhi: Neelkamal Publication Pvt. Ltd. www.neelkamalbooks@gmail.com

4.9 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1: 1. True, 2. False, 3. True, 4, True, 5. True

Check Your Progress 2: 1. Latin, 2. Cyclic, 3. Four, 4. Evaluation, 5. Objectives

****

UNIT - II LESSON : 5

VARIOUS APPROACHES IN ORGANISING CURRICULUM FOR SOCIAL SCIENCE

5.0 STRUCTURE

5.1 Introduction

5.2 Objectives

5.3 Organization of the Curriculum in Social Science

5.4 Correlation Approach

5.5 Integration Approach

5.6 Concentric Approach

5.7 Spiral Approach

5.8 Unit Approach

5.9 Chronological Approach

5.10 Let Us Sum Up

5.11 Lesson End Exercise

5.12 Suggested Further Readings

5.13 Answers to Check Your Progress

5.1 INTRODUCTION

The social science curriculum includes four social developments at different stage and classes. These components are different in nature and deal with important problems. The social science curriculum has to be organized in such way that it can be taught effectively and purposefully. Therefore, the organization should be very comprehensive and broad. It requires to involve different approaches in organizing social science curriculum at school level. These approaches are applicable to different components of social science curriculum.

5.2 OBJECTIVES

After going through this lesson, you shall be able to :

- describe salient features underlying the effective organization of the curriculum, and
- explain the concept, merits and limitations, and various approaches used in organizing curriculum for Social Science.

5.3 ORGANIZATION OF THE CURRICULUM IN SOCIAL SCIENCE

A good organization faithfully includes the materials that have been selected as socially desirable and arranges them to facilitate learning. Following are the characteristics of an effective organization:

(1) Learnable: If chronology provides a more learnable structure than a topic, it should be employed.

(2) Smooth and Continuous Progress from Grade to Grade: Vertical integration involves arranging materials in proper sequence for the student and this assures an order and progressive development in the subject.

(3) Horizontal Correlation: The arrangements of materials should be made insuch a way as to establish relationships and connections between various subjects.

(4) Balanced: Provision should be made for both actual and various learning experience activities and formal study background knowledge and contemporary affairs, details and generalization.

(5) Flexible: It should not be so rigid as to preclude the utilization of current and local developments.

(6) Complementary Repetition: Complementary repetition is sound psychologically and pedagogically. A good organization should provide rich complementarykind of repetition that involves additional facts, new viewpointsand fresh generalizations.

(7) Transfer of Training: By transfer is meant the carry-over value from one topic to another if one studies topic X, he naturally expects to learn the content of X, but he also hopes that when he approaches the study of Y he will be able to understand Y more expeditiously because of his study of X.

(8) Provision for Commonly Agreed Basic Understandings andExperiences: The content which is considered basic and preliminary to subsequent expansion should be plainly indicated. This means that certainspecified concepts/ skills, information and generations should be plainly labeled in course ofstudy.

(9) Catering to Individual Differences: The curriculum can be so organized as to make a contribution towards the solution of the problem of individual differences. It should provide materials that are maturity.

(10) Provision for Individual Variability: It is desirable that the social studies program provides a great variety of reading material, original projects andactivities, which will afford each Student of which he is capable.

5.4 CORRELATION APPROACH

Correlation is the interrelating of subjects. It may be carried on successfully without any formal plan, provided the teacher has a wide range of information and is sensitive to similarities, differences and relationships. It attempts to make eachsubject provide its value to other subject. The interweaving of web of relationships and interpretations is an inevitable process in alert minds. Whether formal division is made for such excursion or not they are made by both teachers and student and so in practice, correlation frequently becomes a philosophy or an attitude rather than a structured organization.

Integration is a form of organization, which emphasizes the social science rather the separate subjects that compose the field. The subjects are reorganized and to some extent utilized but the boundaries between them are freely ignored in the process of arranging materials for teaching purposes. It differs from fusion, however, in that it organizes that the content of the subjects furnish much suitable materials for teaching purpose and that the revolutionary process of discarding all subjects' content and starting with a new alignment of materials is necessary.

Integration may be achieved to some extent by the use of units, through a series of topics, through the limited use of selected portion of subject content etc.Successful integration is supposed to appeal to the student; it ignores scholarly tradition and emphasizes the utility of the material; and it demands psychologically arranged material rather than traditionally organized content.

5.5 INTEGRATION APPROACH

Experiments were conducted in psychology in the beginning of 20th century and Gestalt psychology was introduced. If whole not, in parts whole knowledge isstable in the mind.

These researches ‘and inventions also influenced social studies. An integrated curriculum was introduced in USA. This type of curriculum was based on the unification theory. The ideas and activities will be useful only when these can combine in a unit.

The project method is used in an integrated curriculum. It is an activity centered curriculum. Group-controlled instructions are employed in this type of curriculum.The knowledge of whole is imparted by relating to some social activity. The activity should be related to life. The main focus is to develop social efficiency among the students. These are no compartmentalization

of the subject. The knowledge is considered as a unit. The subject content is the parts of activity. An activity is assigned to a group of students, the required knowledge of the subjects for performing the activity are given to the Students. The learning by doing techniques is used in this type of curriculum. The school subjects are integrated and correlated. The courses of study should be related of real life situations.

According to Henderson, there should not be any barrier or compartmentalization among the subject. It provides such experiences to the students which are easy to understand and easy to use it.

The approach is given by pragmatic philosophy. Kilpartic has employed the project-method and introduction of integrated approach to curriculum. It employs group-controlled instruction which must be a oriented method of instruction.

Characteristics of Integration Approach The following are the main characteristics of this type of curriculum:

(1) The knowledge of subjects is given in the integrated form.

(2) The students learn the various subjects simultaneously.

(3) This type of curriculum is activity oriented and experiences-centered.

(4) This type of curriculum provides knowledge of the subject which is useful in real life.

(5) The student's interests are taken into consideration.

(6) As it employs group-controlled instruction, therefore, duties and responsibilities are assigned to the students.

(7) It helps in developing spirit of team work and feeling of cooperation.

Difficulties of Integration Approach

The following are the difficulties in the construction and use of integrated curriculum:

(1) It is not possible to include the interest of each and every student.

(2) As it is used in group-controlled instruction, therefore, individual interest is not developed.

(3) There is no definite outline or structure of the content.

(4) There is no sequence in the subject-content.

(5) It is very time consuming.

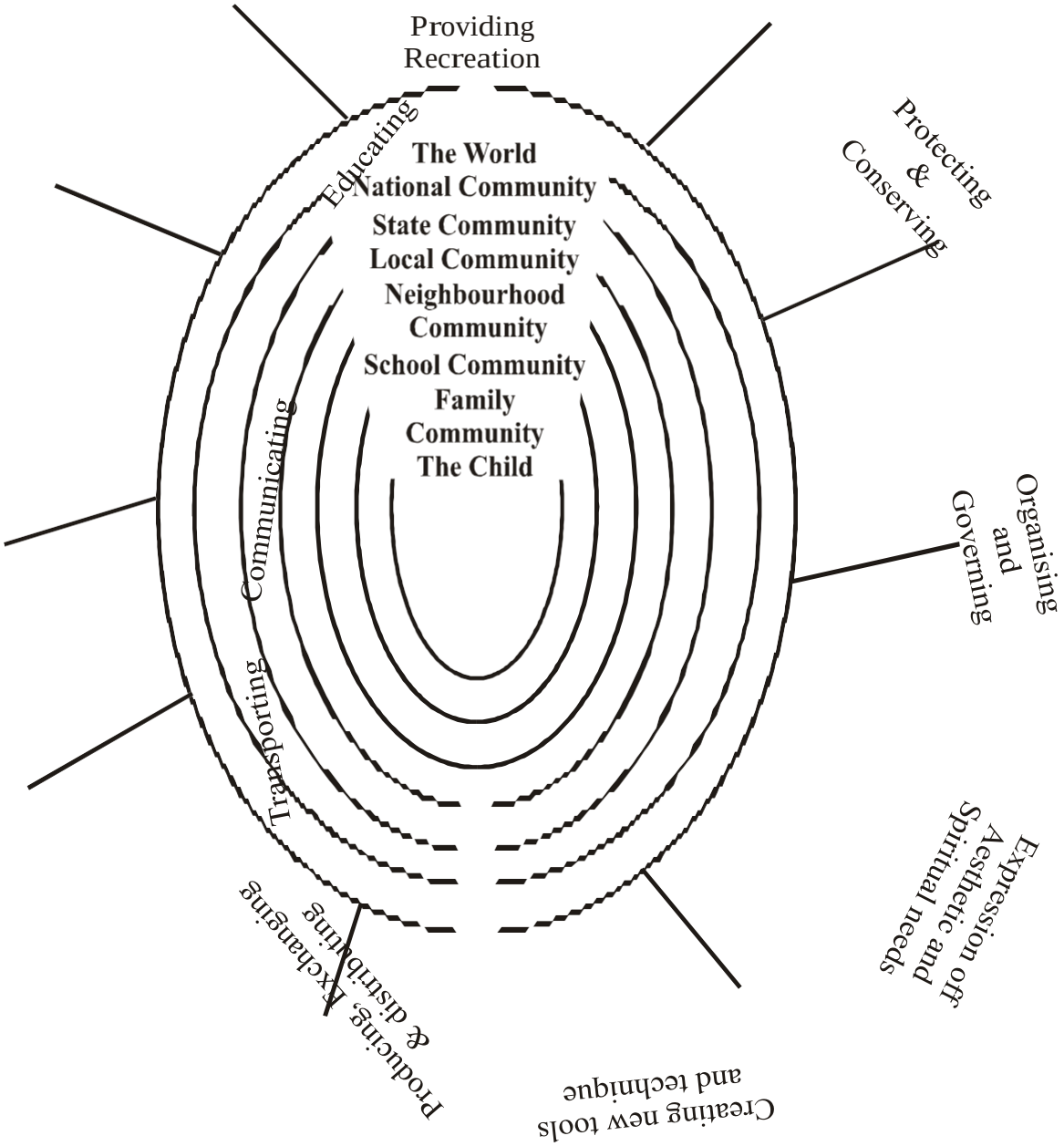
(6) It is not responsible to integrate all the subject on an activity.

5.6 CONCENTRIC APPROACH

Children in the primary classes should develop simple generalizations about, men carrying on their everyday activities. As they progress through the middle and high classes, the

students work with more and more difficult arrangement of information. They thus, deepen and reshape the dimensions of their generalizations. Using increasingly more abstract levels of thought, children refine the same. A sequential arrangement of experiences produces a spiral of cumulative learning. As areas of study at each level are treated holistically, whatever is taught to the child is a whole in itself leaving scope for additions to be made with additional understanding and maturity of the child.

One of the most recent of these designs has been prepared by Paul R. Hanna and is depicted in the following diagram.



The designs in the diagram provide a basis upon which the students mayprepare a programme organized around subject and combinations of subject's studies.

In this design the concentric circles indicated the expanding communities with which the child becomes acquainted; the family and the school in Grade 1. the neighborhood in Grade 2. etc. Superimposed on these communities are categories of basic human activities communicating, organizing and governing etc.

For example, suppose that children are to know about our freedom struggle. In the primary classes, information should be imparted through some of the more important leaders. In the middle stage, the information should be imparted through events Such as the Indian National congress, partition of Bengal, the Gandhian Era, Civil Disobedience, the INA, Quit India Movement: In the secondary stage, the pupils should learn to compare and contrast the freedom movement in India with other countries of the world.

Teaching about UNO-they should know about the United Nations and its role in international peace. In primary classes, they should know about the importance of cooperation among nations, work of UNICEF, WHO, UNESCO, India in the U.N.O. In the middle classes information should be provided in greater detail about the need of cooperation, co-existence, the United Nations etc. In the Secondary stage, more information should be imparted about international peace and cooperation and therole of India in the United Nations and the world.

Advantages of Concentric Approach

(1) Continuous Learning: Concentric approach is a strategy that fosters continuous, unbroken learning of the subject-matter of social science through the primary, middle and secondary Stages. While in the initial stages, thinking is on a simpler level, as the child advances in age and understanding, he thinks in more abstract terms. As the learning sequence progresses from the simplest unit to the most detailed in gradual stages learning is continuous and unbroken through the primary and secondary stages.

(2) Simpler: In this approach although the path is narrower, the way is simpler.

(3) Easy Memorization: The pupil does not easily forget his journey.

(4) Interesting: The pupil is interested from the very beginning. Use of this approach makes social science a subject absorbing and real.

(5) It uses the maxim of 'From known to unknown'. It is easy to proceed from the known to the unknown.

(6) Good Basis for Specialization. For the more intellectual, this approach provides the basis on which academic and specialist studies can be built.

Limitations of Concentric Approach

The limitations of concentric approach are as following;

(1) Psychologically Unsound: In this approach the facts are repeated again andagain. Being devoid of freshness and novelty, the presentation fails to rouse curiosity and create a sense of wonder in the pupils.

(2) Very Simple: This approach does not give a clear and detailed picture of a problem. Its hurried and passing references do not help in understanding complex problems.

(3) No Sense of Time and Space: If this approach is followed it is difficult todevelop time and space sense in the pupils.

(4) Denial of Essential Aspects of Social Science: This is the case of joy of discovery, the freshness of events, the adventures and achievements of great personalities, the atmosphere of an age or era, the wonder of geographical phenomenon and the constitutional land-marks.

(5) Boredom and Dullness: As the children go through the whole course more than once sense of boredom and dullness is inevitable. Children develop asense of familiarity without the fullness of knowledge.

By making the repetition interesting through following a different approach and a fresh point view in different stages concentric may be made useful.

5.7 SPIRAL APPROACH

Several approaches and strategies are used in social science teaching and learning. It provides the awareness and understanding about man, society andnation. The content of social science is very broad and complex specific component or aspect of social science. The focus of social science teaching is to develop man and society.

The social science attempts to answer the following three fundamental questions. These were stated by Mathilesaran in his book 'Bharat Bharti'.

(1) What we were?

(2) What we are? And

(3) What we willbe?

The content of social science is thus, related to past present and future. We plan for

future on the basis of past experience and knowledge. Human developments include social, economic, political and physical aspects. The geographical conditions underline Human working efficiencythat depends on the climate-conditions of a country. In our country human working hours are usually eight hours because of our climate efficiency as such. While in advanced countries working hours are 12 hours per day because their climate efficiency is better than ours. Thus historical description is undimensional while social science is multi-dimensional with regard to man and social progress. A particular period of history should also provide the awareness of social, economic and cultural aspect of the society which would be much more useful and comprehensive.

This type of knowledge and understanding are provided with the help of 'Spiral approach' of teaching and preparing curriculum.

The main focus of social science teaching learning is to achieve with the help of spiral approach a historical period should be described including its social, economic, cultural, political and geographical conditions and then next period in the same manner. The strategyof teaching learning provides comprehensive awareness and it will indicate virtually the progress of man and his society along with the events and facts of thedifferent period in chronological order.

More over an analysis of such content will help to establish the casual relationship of various economics, cultural, social, political and religious factors in the progress of man. It will provide the chronological advancement of man and his fall, along with the casual factors.

Principles of Spiral Approach

The spiral approach is based on the following principles:

(1) Social relevance of the content.

(2) Utility of social content.

(3) Contribution of social, economic, geographical and cultural factors in human progress.

(4) Social economic cultural and geographical progress in chronological order.

(5) Cumulative record of man and society progress is prepared.

(6) Provide the progress of man and society of a specific period.

(7) Indicate the integration of social science components on man and society rather than a social problem.

Advantages of Spiral Approach

The following are the main advantages of spiral approach in social science teaching:

(1) This approach includes correlation and integrated approaches in purposiveway.

(2) It is comprehensive and broad base social science approach. .

(3) It makes the relevance of the components of social science.

(4) The components - History, geography, economic and civics operate meaning fully for understanding the man and society progress and development.

(5) It establishes the importance and relevance of social science subject at secondary stage.

(6) This approach is time-Centered or based upon Chronological approach for understanding man's progress.

(7) It involves the fundamental principles of social science teaching and learning.

(8) The approach is basically man and society centered.

(9) It resolves the complexity of social science content.

(10) It makes the social science broad base and comprehensive.

Limitations of Spiral Approach

It has the following limitations or disadvantages:

(1) The concept of spiral approach is complex.

(2) It cannot be used in teaching all the content of social science.

(3) The approach is not-easy to understand.

(4) It is difficult approach every teacher of social science cannot use it in teaching.

(5) The structure of this approach is not well designed.

Suggestions for Spiral Approach

The following suggestions should be employed in using spiral approach.

(1) The concept of this approach should try to understand.

(2) During teacher training spiral approach should be used in classroom teaching.

(3) Instruction of teaching should be designed for a specific period which should be human dominated.

(4) Teaching lesson should be designed according to spiral approach.

(5) The techniques and devices of spiral approach should be enumerated clearly.

(6) The approach should be practiced to reduce its complexity.

(7) The spiral approach should be used in the context which is human oriented or society-centered.

(8) In chronological emphasis should be given to men and society not the rulers side by side.

(9) It should be presented as cumulative record of human progress and development.

(10) In this approach, main stress should be given to period, time, place economic conditions, social structure and culture.

Difference among Correlation, Integration, Chronological & Spiral Approachesin Social Science Teaching

The spiral approach can be understood by differentiating with other approaches, such as correlation, integration and chronological approach.

(1) The correlation approach is used while teaching a topic of a component of social science is correlated with other components or other teaching subjects, language, bio-science and physical science for the comprehension. For example teaching Hilly region in Geography is correlated with poems of language and mountains or hilly scene of Kargil battle in history.

(2) Integrated approach is used while teaching with project method i.e. experience-centered or group-activities. The students have to take a problem to solve by performing some activities related to the components of social science or other subjects. For example for sending parcel, they have to write address by using language in weighing the parcel and calculating worth ofstamp will require the knowledge of maths is locating the place, they have to consult-map i.e knowledge of Geography etc. The knowledge of the schoolsubject is integrated activity which is to be completed or performed.

In spiral approach knowledge of the components of social science is imparted along the chronological order. During different period or year's social, economic, cultural and geographical progress or down fall description is given. This approach is helpful is establishing cause-effect relationship.

5.8 UNIT APPROACH

The unit approach is based on the growing acceptance of the Gestalt- organization-Field, Theories of learning which emphasis the 'Wholeness' nature of learning. This approach is contrary to the older atomistic conception of learning according to which learning was a matter of adding one small item of knowledge to another bit by bit. The new approach is based upon the assumption that effective learning takes place in an environment in which the goals are clearly perceived andevery phase of the operational procedure is viewed as a relational part of the total learning situation. The underlying assumption is that the learner reacts to the situation as a whole and not to parts in isolation.

Definitions of a Unit

Some terms in modern educational usages have been more extensively used with as much disagreement as to meaning as has the term 'Unit'.

According to Bossing, "A Unit consists of comprehensive services of related and meaningful activities so developed as to achieve pupil purposes, provide significant educational experiences and result in appropriate behavioral changes."

The Dictionary of Education defines a unit as "An organization of varied activities, experiences and types, learning around a central problem or purpose, developed cooperatively by a group of pupils under teacher leadership, involves planning, execution of plans and evaluation of results."

James High defines unit approach in teaching secondary School social Studies' as' "It is more than a mere technique and is often called the unit approach rather than method. The primaryrequisite is a point of view that will allow the imaginative instructor to arrange and organize all available and pertinent information around a nuclear idea and then select and provide references, aids and activities that will enable his students to master the basic material."

H.C Morrison has explained the 'Unit Method' in detail in his book 'The Practice of Teaching in Secondary School' published in 1926. The unit method is very popular and frequently used in the USA.

According to Morrisson, 'Unit is a comprehensive and significant aspect of the environment of an organized science and art.'

According to Wesley, 'Unit is an organized body of information and experience designed to effect significant outcomes of the learner'.

Jaolimek John defines unit "As a means of organizing materials for instructional purposes which utilizes significant subject matter content, involves pupils in learning activities through active participation intellectually and physically and modifies the pupil's behavior to the extent that he is able to cope with new problems and situations more competently."

Richard Survey has pointed out in Social Studies Instruction in Elementary School as. "A teaching unit in social studies is a comprehensive instructional planspecifying the 'what' the how' and 'when' of teaching a big idea."

According to East S Johnson, "Unit is a segment of experience which is cut out for study, within it, i.e. method employed. It is my understanding that every unit is a 'project'. It is a project in the sense that one projects enquiry into it. Furthermore,every unit has a topic, theme or careful tendency or whatever name you choose to call it, otherwise it could have no unity. Every unit is a 'contract' in the sense that the student enters upon a contract or obligation to Study how the

things which it contains are related and how a conclusion is reached. Every unit is also a 'problem' a problem of significance and meaning in some unknown or less than thoroughly known phase of human experience."

Hanna, Hageman and Potter state," A unit can be defined as a purposeful learning experience focused upon behavior of the learner and enable him to adjust to a life situation more effectively.

Main Characteristics of a Unit

(1) A unit is a purposeful learning activity or experience.

(2) A unit is around a central problem.

(3) A unit has a significant content.

(4) A unit is comprehensive enough to have scope and unity.

(5) A unit is developed cooperatively by a group of pupils.

(6) A unit is developed under the guidance of the teacher.

(7) Aunit involves pupils in learning intellectually and physically.

(8) A unit modifies the pupil's behavior to the extent that he is able to cope with new problems and situations more competently.

(9) A unit emerges out of the pupil's experience.

(10) A unit provides opportunities for creative experiences.

(11) A unit is flexible and provides opportunities in adopting instruction to individual differences of children.

(12) A unit is a logical useful division.

(13) A unit is evolutionary or functional.

Elements of a Teaching Unit

A good teaching unit has nine elements but the sequence of those elements is not fixed. Following sequence is generally followed:

(1) Overview: This implies the consideration of the needs of the students while formulating the objectives of teaching unit.

(2) Inventory or background: This element is concerned with exploring the entering behavior of the students. The teacher is required to establish the behavior repertoire bylinking the new knowledge with the previous knowledge of the students.

(3) Presentation: This element is concerned with providing new experiences tothe learners. It includes an analysis and presentation of the elements of teaching units in a logical sequence so that they are helpful to the students. With a view to encourage student's participation in teaching, question-answer strategy is employed.

(4) Motivation: This element of the teaching unit is concerned with the creation of motivational situations to facilitate learning.

(5) Summarization: This element of the unit is concerned with providing a summary of the unit.

(6) Drill: This element provides an opportunity to the students for drill or practice which enables them to retain longer what is learnt.

(7) Review: This implies giving the salient features of the unit orally.

(8) Organization: This element involves giving assignments to the students toorganize their learning experiences of their own.

(9) Evaluation: This element of the teaching unit consists of ascertaining how far the teacher has been successful in achieving the objectives of the lesson, i.e. to what extent students have grasped the content and developed meaningful behavior.

Characteristics of a Good Teaching Unit

A good teaching unit possesses the following characteristics:

(1) A teaching unit consists of meaningful elements.

(2) A teaching unit arranges all elements in such a manner as the students can understand the whole.

(3) A teaching unit provides the starting point of teaching activities.

(4) A teaching unit provides the ending points of activities.

(5) A teaching unit has a broad and comprehensive structure.

(6) A teaching unit has a practical form rather than theoretical.

(7) A teachingunit provides for various activities so as to create appropriate learning structures by the teacher.

(8) A teaching unit provides for the interaction of the teacher-taught.

(9) A teaching unit presents the basis for evaluating the performance of the students.

(10) A teaching unit reveals the forms of teaching activities and selects appropriate teaching strategies, tactics and teaching aids.

(11) A teaching unit is economical from the point of view of time and energy.

(12) A teaching unit achieves the learning objectives.

Classification of Units

Units may be classified into four types:

(1) Subject-matter Units

(2) Experience Units

(3) The Adaptive Units or Units of Adaptation

(4) The Resource Units

(1) Subject Matter Units: In these units, emphasis is more on the subject-matter than the learner. The wholeness or integration is achieved through large bodies of information or subject-matter to be acquired or achieved. It has three asfollows:

(i) The Topic Unit: It is like the traditional topical organization of the subject-matter. It differs from that only in degree. It is not recommended by modern educations, as teachers in this approach are apt to include too much or too little and thereby confuse the students.

(ii) The Generalization Unit: This is based on the understanding of some principle. For example, a principle of Utility could be selected in economics as the central factor.

(iii) The Environment Unit: This was developed by Morrison of University of Chicago and is, therefore, also known as the Morrison Unit. Morrison defined it as "A comprehensive and significant aspect of the environment, of an organized science, of an art or of conduct, which when learned results in adaptation in personality." Environmental unit is organized around are important aspect of the environment orculture.

(2) Experience Units: These are based upon the experiences of the learner on certain life situations or problem situations. The learner fully reacts to situation he is confronted with. The leaner's needs purposes and interests determine these experiences. Need, purpose or interest is the binding and motivating force. This results in greater effort, knowledge and understanding on the part of the learner. Experience unit is of three types as: (i) Student-interest unit, (ii) Student-purpose unit, (iii) Student-need unit.

An important limitation of the student interests is that all areas of curriculum cannot be planned on this basis. The learner may not be interested in all the areas of the curriculum. Student-purpose and student-need units cannot be planned in advance. They have to be continuously planned as they develop.

(3) The Adaptive Units: In the words of Jones of the University of Pennsylvania who is the originator of this unit, "a unit consists of a group or chain of planned co-ordinate activities undertaken by the learner in order to obtain control over a type of life situation." The central point in the adaptive unit is that it is the 'general ability' that should be developed to meet specific life integration of the individual. The development of acquisition of skills, habits, knowledge, each as a separate aspect of learning does not result in unification or integration of the individual.

(4) The Resource Units: A resource unit likes the 'subject matter type or of the 'experience type' is not planned for a specific group of pupils in a particular school and for a definite time. It is concerned with a broader field and, in fact, it serves as a guide for teachers working at different places. This unit is generally built by a group of teachers who operate in a workshop guided

by specialists and helped by the extensive library facilities. Once built up, it is mimeographed and made available to other teachers' of the concerned subject. A resource unit serves as a teacher's guide in planning his programme. It includes:

(i) Statement of objectives concerning the theme,

(ii) Problem,

(iii) The approach or initiation,

(iv) Content of subject matter basic to the area of study,

(v) Direct and related experiences,

(vi) Organizing and summarizing experiences,

(vii) A collection of instructional resources.

Implications and Working of Unit Approach

The centre of interest usually offers an opportunity to cover a considerably wide area. For instance, a child in the first class is interested in knowing more and more about his own school. Obviously 'school' is his centre of interest. Therefore, for him, 'school' may be a suitable unit of work. The topic provides both intellectual and manual work. Also, it offers opportunities for him to work individually and in co-operation with his class-mates. This unit of work is broken up into a few sub-units, each covering an important aspect of the main problem or a topic, in which a child is profoundly interested. Thus the unit can be conveniently broken up into sub-units such as:

(i) The School is our Home.

(ii) How do we come to School?

(iii) Annual Day of the School, and

(iv) To be a good boy or a girl at Home and School.

In other words, a unified course in Social Studies consists of a series of problems or units of study, drawn from the major areas of the daily living. Information from all subjects contributes to the solution of the problem. It thus cuts across the subject boundaries and presents content in a composite and united form, centered around children's typical interests.

The choice of the unit of study or of unit work is based on the following criteria:

(i) The unit is related to the current needs and problems of the society.

(ii) It is appropriate to the physical and mental development of the children, their needs and interests at the particular age level.

(iii) It is conducive to achieve life-like, practical and creative learning.

The organization of the subject of Social Studies into a series of a unit of work offers the best transition from a more verbal learning of a practical approach. The unit of work offers manyopportunities for learning through activity and provides for constant correlation with the physical, social and cultural environment, and even with crafts', wherever possible. A unit of work, moreover, is realistic and functional in nature.

Sequence of the units, in Social Studies Programme

The Sequence of the units in Social Studies programme in the syllabus is based on the studies of child growth and development. These suggest that children should first deal with direct experience and with the simpler aspects of their own environment. Then, they are prepared to progress gradually, to its more remote and complex aspects.

Another pedagogical consideration in determining the grade-placement of various units of work, is to group the units of work for each grade, so as to develop a central theme, or a big idea, throughout the year. Thus an attempt is made to develop, also, the grade- themes for each grade or class.

The sequence of the grade-themes again is based on the principle of widening children's mental horizon, gradually, from the immediate to the remote and from the simple to the complex aspects of our living. In fact, an attempt is made to fit every unit in a sequence both horizontal and vertical.

For instance, transport is one of the major areas of our dailyliving. The problems listed under this are:

(i) How do we come to school?

(ii) How do people travel in town and village?

(iii) Avoiding road accidents,

(iv) Undertaking a rail journey,

(v) How do goods come from abroad? And

(vi) The age of airplanes or a shrinking world.

The units, in the order they are stated, represent a vertical sequence form grade to grade. They are in conformity with the pedagogical principles as such 'from immediate to remote and 'from simple to complex.'.

Check Your Progress- 1

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson

1. An effective approach considers individual variations in social science curriculum. True/false
2. A spiral approach considers the simultaneous developments of social dimensions. True/False
3. An integrated approach is activity and group oriented curriculum. True/False
4. The unit approach is most appropriate from teaching point of view. True/False
5. The chronological approach is applicable in history curriculum. True/False
6. The correlation approach is useful in comprehensive point view. True/False

5.9 CHRONOLOGICAL APPROACH

Teaching chronology is one of the important objectives in teaching history because the sequence of events is the clue to understanding history of both past and present. History is one school subject which helps in the development of a mature sense of time and chronology. It is imperative that the pupils know important dates, not because those dates are significant in themselves but because they are the key to a recognition and grouping of the various elements in the total situation. Chronology, of course, is not history but certainly it is the scaffolding of history. It confers the two ideas of change and continuity in human affairs. For pupils to develop a sense of the past and to see its relation to their own lives, they have to move back and forth along a base time line. This is the only way students can build a sense of perspective or formulate for themselves significant time concepts. Development of time sense among students, therefore, is one of the responsibilities of the history teacher.

Dimensions of Chronology in History

The essential dimensions of chronology in history are as follows:

(i) Location (ii) Distance

(iii) Duration &, (iv) Simultaneity

(1) Location:

By location we mean spotting the events on the line of time. The time, we know, is infinite and flowing. Unless we locate the facts in time and space, we cannot measure distance. Again, on spot is connected with the other. When we say that Indian National Congress was founded in 1885 or India became independent in 1947, we only point to a spot. With the help of relation that exists between the various spots on the time line, we determine the relative position of events. Location is, according to the needs of history, the most preliminary work. As no event or person exists in isolation and thus, location is very important dimension of chronology.

(2) Distance:

Distance means the length of time that stands between two personalities, between two events, between two periods. For examples, the distance between twoperiods will show the social and cultural progress or retrogression that we have made.

While spotting the line of time to serve this purpose, we should select only those dates which are landmarks. A.D. 1526 is a date of this nature in Indian history, because it signifies the decline of the Sultanate and the beginning of the Mughal rule; AD 1707 is another important date because it signifies the gradual downfall of theglorious Mughal Rule in India; A.D 1947 is still another significant date when India finally became free.

The dates also provide associative bonds. For instance, we know India became free in 1947; by subtracting it from 1984, we find that India became independent 37 years ago. With all the limitations of the human factor involved, we can measure life and activity.

(3) Duration:

Byduration it is meant that period during which an idea, a religion, a philosophy, a movement assumes a concrete shape. With the help of the duration, we balance our judgment. We become more positive and decisive in our conviction. We can easily measure the process of development during a particular period. For example, an event known in history as that Industrial Revolution was the result of inventions spread over a period of 120 years from (1775 to 1870). Similarly, the struggle for Indian Independence which started in (1857) ended in (1947) when finally threw the shackles of slavery.

(4) Simultaneity:

Parallel developments have taken place in the history of different countries simultaneously and different times. While teaching history, these should be pointed out for comparison and contrast. For example, when England was enjoying its palmy days in the period of Elizabeth, India too was passing through a prosperous era during the period of Akbar. Similarly, during the modern period (e.g., a labour government holding office in Great Britain and the Declaration of Indian Independence have positive relationship). These comparison and contrasts will lend relevance to developments in history in different countries.

Varied Time Concepts

Persons, events, trends, movements and forces of historical Significance have appeared at recorded or otherwise ascertainable time in the past. Different types of time concepts as general designations, proximate designations and specific dates have been used.

Examples of Varying Types of Time Concepts

General Designations	Proximate	Specific Dates
(1) A long time ago	The 1920's	Jan 26,1950
(2) Recently	About 1760	June 28,1914
(3) Before	The second	Oct 2,1869
(4) Eventually	Century	
(5) Once upon a time	B.C	Centennial date
(6) In early times	For a decade	200 years ago
(7) During the recent past	Before the sixth century	50 years hence
(8) At about the same time as	From 1526-1857 Decade	Decade
(9) For many years	Time of Ashoka	Century

Generally designations of time are used when exactness of a time interval is not of significance. More definite terms are used for proximately designating the length of historical periods and for roughly dating events. Terms range from two centuries ago as age of Darkness, Age of Discovery, and Ancient Times. Such terms are useful in dating approximately a development or tend and especially in teaching the lapse of time.

Making Pupils Chronology Conscious

How the basic ideas and dates of history can be made to stay with the pupils and how pupils develop a concept of time is a very important issue in the teaching of history. Dates are generally regarded as slippery, soon forgotten. How to ensure that dates stay in the pupil's minds and 'they develop a deep and full understanding of time and chronology?

An overall understanding of time and chronology is the result of long, continuous,

cumulative exposure to its various elements by carefully planned experiences. The children need to understand how time is measured in terms of hours, days, weeks, etc. The less precise concepts gain meaning from first-hand experience, e.g., 'now' 'then', 'long ago', 'after', 'before' etc. By and by, as the child matures, such words as decades, generations, century, era and millennium become meaningful to him. By the time the student reaches the higher secondary Stage, he should be able to use the calendar, recall date-events and use definite and indefinite time; expressions and arrange happenings in sequential order. At this Stage, the pupil finds time separated from personal experience. Here, it is necessary to give social relevance to the mathematical continuity of human development.

The secondary School Student needs help to acquire and develop the following skills;

(i) Use correct terms needed in our system of reckoning time;

(ii) Interpret correctly, within reasonable limits, time concepts to varying degrees of definiteness;

(iii) Enquire the time of occurrence of events, movements personalities and file new acquired information into basic framework provided by a few key dates;

(iv) Use time lines and time graphs; and

(v) Arrange series of related events in chronological order.

Some Guidelines for Teaching Chronology

(1) Use of Significant Dates: Dating a historical event is the only true and accurateway of placing it in time. Aspecific date is, therefore, more meaningful than a

general designation. Research also reveals that definite dates are easily learnable than are vague designations. So a history Course should stress a selected number of key or pivotal dates chosen on the basis of their historical significance. Each date should be introduced in association with one or more events that it locates in historical time. The dates should be emphasized by repeated use in class and other study activities. They mayserve as chronological signposts or page upon which students can hang other historical dates, thus forming a chronological framework.

(2) Developments of Concepts of B.C and A.D: Enough practice and explanation should be given to the students for the historical recognition of B.C as indicating earlier and about A.D showing later times.

(3) Meaningful Sense of Chronology: Students can develop a meaningful senseof chronology byrepeatedly relating events that had significant sequence. Their learning may be reinforced by recurrently facing such questions as: When did the event occur? What related event(s) preceded it or followed it? Were theevents related in cause or effect as well as in time?

Regressive time lines only present the landmarks in historical events and the span of time presented by a single unit is long might be 100 and 50 years. For example, in a lesson on Guru

Nanak, to give an idea about the time in which Guru Nanak lived, travelled and preached, a regressive time line may begin with A.D 2000 and take 50 years as its unit. There important events may be placed on the time line-Independence of India, Battle of Plassey (1757), signifying the beginning of British rule in India, (1707) death of Aurangzeb signifying decline of Mughal Empire, (1526) First Battle of Panipat, signifying the establishment of Mughal Empire, (1469) the birth of Guru Nanak. After locating the topic in a proper place, we may take the help of a progressive time line to present the happenings related to the topic.

Check Your Progress- 2

Note: (a) Answer the questions given below

(b) Compare your answers with those given at the end of the lesson

1. The main characteristics of organization of social science curriculum is-

   (a) Continuous progress (b) Learnable

   (c) Individual Variation (d) All the above

2. The main approach of organization of social science curriculum is

   (a) Unit approach (b) Spiral approach

   (c) Integrated approach (d) All the above

3. The chronological approach is used in

   (a) Geography (b) History

   (c) Economics (d) Civics

4. The Unit approach of curriculum is-

   (a) Child centered (b) Content-centered

   (c) Integrated approach (d) Teacher centered

5. Activity or group centered approach is-

   (a) Unit approach (b) Correlation approach

   (c) Integrated approach (d) Spiral approach

5.10 LET US SUM UP

Thus, we can go over the main points that though the components of social science curriculum are different in nature but they have been organized in such a way that it helps one in dealing with the various important issues related to the social development at different stages

and classes. Moreover it's all possible because the social science curriculum is being organized in its best way which can be taught in effective and purposeful way.

5.11 LESSON END EXERCISE

Short Answer Type Questions

1. What do you understand by Correlation approach?
2. Give characteristics of Integration approach.
3. Explain the limitation of concentric approach.
4. Give definition of Unit approach.
5. Explain Chronological approach.

Essay Type Questions

1. What is concentric method of organizing materials in social studies? State its merits and limitations.
2. What is Chronological approach of organizing materials in social studies? Explain its advantages and limitations.
3. What do you understand by unit? State different types of units. What are elements of good teaching unit?
4. Explain essential steps in unit planning.
5. Discuss merits and demerits of unit method.

5.12 SUGGESTED FURTHER READINGS

Jha. S. A. (2011). Teaching of Social Science. New Delhi: APH, Publishing Corporation.

Sharma. R.A. (2004). Teaching of Social Science. Meerut: Surya Publication,.

Sharma. R.K. (2008). Teaching of Social Science. New Delhi: Lotus Press. www.lotuspress.co.in

Sharma, P. S.(2011). Teaching of Social Science (Principles, Approaches and Practices. New Delhi: Kanishka Publishers, Distributors. kanishka_publishing@yahoo.co.in

Ruhela, S.P. (2019). Teaching of Social Science. New Delhi: Neelkamal Publication Pvt. Ltd. www.neelkamalbooks@gmail.com

5.13 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1 : 1. True 2. True 3. True 4. True 5. True 6. True)

Check Your Progress 2 : 1. (d) 2 (d) 3. (b) 4. (b) 5. (c)

LESSON NO. 6 UNIT–II

TEXT BOOKS IN SOCIAL SCIENCE

6.0 STRUCTURE

6.1 Introduction

6.2 Objectives

6.3 Meaning of Text-Book

6.4 Definitions of Text-Book

6.5 Characteristics of Text-Books

6.6 Importance of Text-Books

6.7 Qualities of Good Social Science Textbooks

6.8 Text-Book of Social Science

6.9 Role of Library and Reference Books in Teaching Social Studies

6.10 Lets Us Sum Up

6.11 Suggested Further Readings

6.12 Answers to Check Your Progress

6.1 INTRODUCTION

The process of education which every school going child wades through is midst of prescribed text books with which the child's satchel lies packed up. The prescribed books are everything for the learner. They serve the purpose of a tool in the hands of the teachers. Thus, they are able to carry on their routine of teaching in the class room situations. The school text books needs to be excellent through and through. Only then the teachers in the schools are able to discharge their duty more efficiently.

6.2 OBJECTIVES

After going through this lesson, you shall be able to :

- describe the concept, meaning and importance of social science text books,
- describe the internal and external qualities of a good social science text book, and
- explain the necessity of library as well as reference books in the teaching learning process.

6.3 MEANING OF TEXT-BOOK

A text book is a prescribed book for the student of a particular age group. It covers items

as given in the syllabus. Such a book forms the basis of the teaching learning in the class. Later on, the students can revise their syllabus by studying that book whenever they feel like doing so.

Text-books are standard works or manuals of instruction in a subject of study. They are the never failing friends of the students as well as of the teachers. Atextbook has been defined as a instrument of instruction that facilitates teaching learning process. It is written on the basis of a prescribed syllabus in which the major ideals of the subject matter are selected and summarized judiciously. They are organized logically according to the mental make-up and psychological requirements of the students so as to facilitate teaching; sometimes a text book is called "The teacher in print. Nevertheless; it can by no means, replace the teacher. Rather it is to be used to aid and supplement his work.

6.4 DEFINITIONS OF TEXT-BOOK

According to Webster's Dictionary “A text-book is any manual of instruction, a book containing a presentation of the principles of the subject used as a basis of instruction”. The Shorter Oxford English Dictionary says, “A book used as a standard work for the study of a particular subject a manual of instructions in a subject of study.”

According to the writer's Handbook for the development of education materials; "Text-book is the term for a book used in a course as the base around which the course is built."

L.J. Lewis says that text-book is a tool both for the pupils and the teacher. According to Mukerjee, "Text-book may be looked upon as the symbol of

National Culture. They are not national symbols in the same sense as Ashoka Chakra,

but they are perhaps more revealing of national ideas, ideals and values than the figures on our coins and flags."

The term text-book is broader than the term school book. To Hall-Quest it is "a record of racial thinking; organized for instructional purpose."

To Lange, "It is a standard book for any particular branch of study."

6.5 CHARACTERISTICS OF TEXT-BOOKS

Analysis of the definitions of a text-book gives us a few characteristics which are given below:

1. It is standard book in the subject.
2. It is meant both for the teachers and the students.

3. It is a manual of instruction.
4. It is both content and technique.
5. It is used for formal as well as informal education.
6. It is the foundation on which the course is built up.
7. It is a tool for realizing the instructional objectives of the subject.
8. It contains selected material.
9. It presents material in graded form.
10. It is a principal source of study material for a given course.
11. It is a learning instrument used by the students.

6.6 IMPORTANCE OF TEXT-BOOKS

Text-Book occupies a very important place in the field of education. In Indian situations, their importance is all the more as we have shortage of instructional materials like films, T.V., teaching machines etc.

According to the Encyclopedia of Education; "Text-books have been associated with schools for as long as Schools have been known. undoubtedly text-book is the core around which subjects are taught. In a very real sense, the text book is thecurriculum.

1. They determine not only the subject matter to be taught but also the methods of teaching.
2. They are the only tools in the hands of teachers in Indian situations with which they are able to run their teaching programme smoothly.
3. They are good learning instruments for the students as they can revise their lessons whenever they want to do so.
4. They are the chief vehicles for attaining the goals of curriculum.
5. They indicate clearly what the teacher is required to know and what the pupils are supposed to learn!
6. They always focus the attention of the teacher as well as the learners. Thus chances of deviations are reduced to the minimum.
7. Text-Books give concrete form to the curriculum. Scope of any topic can be better known with the help of text-books.
8. Text-Books usually have graded material which is arranged according to the needs and requirements of the learners. They help the teacher in right planning of the yearlywork.
9. They lead to economy in effort and save much time and emerge. Thus the teacher need not dictate notes in details.
10. Text-Books encourage the students for self-education.
11. They give uniformity to teaching in different classroom situations where text- books are used.

Check Your Progress -1

Note:(a) Answer the questions given below

(b) Compare your answers with those given at the end of the lesson

1. Text books are the practical aspect of curriculum. True/False
2. Text books are the main component of instruction. True/False
3. Text books are used in LCI and TCI effectively. True/False
4. NCERT prepares text-book for school and university levels. True/False
5. Curriculum and text-books are complementary in educational process. True/False
6. UGC prepares hooks for university level. True/False.

6.7 QUALITIES OF GOOD SOCIAL SCIENCES TEXTBOOKS

A text-book is called good one if it contains some specific and general qualities. General qualities are found in all type of similar books. The specific qualities refer to some books which are written with specific purpose.

The general qualities are seen externally in books where as internal qualities are specific and they are known if we make efforts to find them out.

Physical aspect of the text book can be seen externally. We may see to it under the following heads: (1) Physical aspect and (2) Academic aspect of the text-book.

Physical Aspect of Text-Book

I. Size of the Book

i) It is suitable for the learners.

ii) It is convenient in handling and carrying.

iii) It is neither too big nor too small for the students for whom it is meant.

II. Printing of the Books

i) The printing is neat and clean.

ii) It is free from any type of errors.

iii) The inking in the printing is balanced throughout.

iv) The blocks are clearly printed in the book.

v) There are sufficient margins on all sides of the page.

vi) The spacing between the words is even.

vii) The spacing between the different lines contained on a page is suitable.

viii) The spacing between the different paragraphs is satisfactory.

ix) Design of the pages is open rather than crowded.

x) Each chapter begins on a fresh page.

xi) Length of a line is within the eye span of the child.

III. Type Size of Text-Books

i) Different type sizes are used for the cover page, title, text and captions.

ii) The type size used in the book is suitable for the age group.

iii) A balance in the use of different type size is maintained.

iv) It does not strain the eye sight of the pupils.

IV. Paper used in Text-Books

i) Paper used in the book is of white colour.

ii) It is adequatelythick.

iii) It is smooth.

iv) It is durable.

v) It is of reasonable good quality.

V. Binding of Text-Books

i) The binding of the book is sufficiently strong.

ii) It opens flateasily.

iii) The sides of the book are properly trimmed.

iv) The folding of the paper is proper.

v) The cover page of the book is durable.

VI. Price of Text-Books

i) The price of the book is reasonable. It suits the pockets of majority of the parents.

VII. Over all get up of Text-Books

i) The get up of the book is fine.

ii) Its title page is attractive.

iii) The material is presented according to some accepted norms.

Academic Aspects of theBook

From academic point of view, a good text-book has the following characteristics.

I. Thematic Content of Book

1. The subject matter is according to the mental level of the learners.
2. It is capable of sustaining interests the student.
3. It is related to the physical land social environment of the learners.
4. There is a variety of themes.
5. The facts given are correct and up-to-date.
6. It provides new information to the learners.
7. It is free from such incidents and references that may hurt the feelings of the children.
8. It inculcates the qualities of good citizenship.
9. It contains enough humorous material.

II. Organization of the Contents and its Presentation

1. The subject matter is divided into convenient units.
2. Length of each lesson suits the learners.
3. The reading material is graded in order of difficulty.
4. The presentation suits the nature of the contents.
5. The different themes are presented through variety of forms such as essays, stories, poems, dialogues and plays.
6. The style of presentation is simple and clear.
7. The title of each lesson is brief in Meaningful and suitable.

III. Textual Language

1. The textual language is according to the mental level of the learners.
2. The language used is correct.
3. It is appropriate to the situation or context.

IV. Illustrations (Visual Aids) Used in Text-Book

1. Abstract concepts of the book are clarified with the help of pictures and diagrams. It makes easy to comprehend.
2. The pictures used in the book are drawn well.
3. They are realistic.
4. They are relevant to the text.
5. They motivate the learners.
6. They are properly distributed throughout the book.

V. Textual Exercise in Book

1. Every lesson is followed by exercises characteristics
2. Instructions to do the exercises are clear.
3. There is a variety of exercise on each lesson.
4. They help the teachers in diagnosing the areas of difficulty.
5. The exercise for each lesson is purposeful and adequate.
6. Instructions to do the exercises are clear.

Check Your Progress -2

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson. Multiple Choice Type Questions:-

1. Text books are used in:-

   a) LCI b) TCI c) GCI d) All the above

2. The main type book is:-

   a) Text books b) Supplements book

   c) Work book d) All the above

3. The main aspect of text-books is:-

   a) Physical aspects b) Academic aspects

   c) Both d) None of these

4. Academic aspect of text-books includes:-

   a) Textual language b) Content structure

   c) Illustration (aids) d) All the above

5. Physical aspect of text-books includes:-

   a) Printing aspect b) Paper Quality

   c) Size and biding d) All the above.

6.8 TEXT BOOK OF SOCIAL SCIENCE

The text book of social studies concerns the social aspect of life in its wider sense of the word. In academic as well as physical aspects, the books should possess the qualities discussed in

the preceding pages of this chapter. Besides, it should possess a few more qualities which are explained there below.

(1) As far as subject matter of Social studies book is concerned, it is expected to deal with the environment of the learners very thoroughly. The subject matter has to be up-to-the-mark and up-to-date in every way.

(2) Since the main purpose of social studies is to reveal to the children where they are in time, space and society-contents dealing with all these things have to be there in the book in a very systematic way.

(3) Usually the subject of Social studies is taken up as dull and boring. The text- book for this subject has to be reality a good one which should arouse interest in the learners.

(4) The text book writer of this subject is expected to be fully aware of things all around the learners. He should be busy in modifications and revision of the book every now and-then in this age when we are seeing a large number of changes almost in everything.

(5) The book should be free from anytype of bias. It should not contain undesirable element.

(6) Facts supported by evidences should be given in the book. Truths and factsshould not be concealed by any type of efforts.

(7) The style of the book should be such that it stimulates a spirit of further enquiry in the learners. They become fully well awakened students ever ready to add to their knowledge.

6.9 ROLE OF LIBRARY AND REFERENCE BOOKS IN TEACHING OF SOCIAL STUDIES

Library is a laboratory for tackling the problem of individual differences. On the one hand, it becomes the centre for displaying, maps, drawing pupil's work; onthe other hand it can become a collection of films, artistic things, specimens, models, etc. So, the library is an index of pupil's sentiments and achievements. In it, all pupils can study, according to facilities and their aptitudes. Books relating to all aspects of Social Studies as stated below should be available in the library/laboratory.

The Social Science, as an area of School Curriculum, demands a lot of reading on the part of both the teachers and the pupils. There is the utmost necessity for theprovision of book as well as non-book resources for the proper teaching and learning of Social Science.

The main objectives in building a Social Science library are :-

1. To create interest in the subject;
2. To stimulate the student's mind into a fine restlessness;
3. To develop in the student a critical attitude and a capacity for independent judgement.
4. To cultivate in the student a taste for extra reading; and
5. To acquaint the pupils with the various forms in which Social Science materials can be had.

Important Library Resources for Social Science

Book Resources : Books are essential for presenting different points of view, for providing adequate background for understanding the people, the processes and the places, so essential in Social Science instruction. In book resources we can include:

1. Text-books : The library should have a variety of most up-to-date text-books in different sections of Social Science.
2. Unit booklets : The booklets on a variety of topics, ranging from family life and neighbourhood to people of other lands and places, should be available in the library.
3. Library Materials : Inspirational and imaginative literature, particularly tales of adventure, should appear prominently along side books of information on children's hobbies-which may be anything from boats and balloons to kites or from doll houses to dress designs. Easy biographies, historical series, animal stories, etc., are favourites with children. Trave stories are really magic carpets to those who cannot leave their homes.
4. Reference Material : The library should be fairly well-equipped with reference materials-standard or conventional reference books and non- conventional reference books. Conventional reference books include dictionaries, encyclopedias, year books, atlases, maps, charts, pamphlets, handbooks, manuals, syllabi of different classes, and books of knowledge. There should be some picture collections which should

include well-known masterpieces and everything to which teachers and children are attracted e.g. animals, insects, flowers, portraits, seasons, holidays, places of interest and events.

The non-conventional reference materials consist of all other library books that may be employed for reference service of any other kind. They include books on miscellaneous information and books on special subjects-history, economics, civics, sociology, anthropology, Government and political theory.

Non-book Resources : The field of Social Science is concerned with happenings in the local community, the state, the nation and the world. Naturally, it becomes essential that books are supplemented by periodicals, pamphlets, newspapers aand other such material which may help vitalize the teaching of Social Science with the latest in the field. The following non-book resources should be available in the Social Science library

(i) Periodicals : Some good periodicals and magazines which throw light on current events and various aspects of Indian life showing art, literature, music, dance, etc., should be available in the library.

(ii) Pamphlets : Pamphlets published by various Government agencies and bureaus for specialized service are also very important sources of information about different walks of our Social, economic and political life. They are generally low-priced. Every school library should subscribe for these.

(iii) Newspapers : It is essential that the Social Science teacher and pupils keep well-informed of events of national and international importance. A newspaper is a wonderful source of such information. Some local newspapers and one or two other daily newspapers of all-India circulation need to be provided.

Utilization of Library Resources :

It is necessary that pupils are taught the techniques of locating relevant references and resource material quickly. Assignments should be given in the form of problems. This would compel the pupils to investigate and examine multiple sources. In the course of the search, pupils will not only assimilate some of the essential facts concerning the learning unit, but more important than that, they will be using these facts in a creative and productive way to arrive at their own independent conclusions,

and thereby, will invariably grow in enriched knowledge, abilities, skills and interests. The library, today, is considered to be the Intellectual Laboratory of the school.

It is being rightly felt today that textbooks are no longer 'Educational Bibles' to be used alone. They need to be supported, supplemented and reinforced by other sources of information. Alibrary is the treasure vault of ideas, the store-house of knowledge, and the flowing stream of living thought. If Social Science is to be a living and vital discipline, the library must be accepted as an integral part of the entire Social Science programme.

6.10 LET US SUM UP

Thus, we can say that a good text book must be based upon educationally sound principles so that it can be best utilised for the achievement of objectives and achieving competencies at mastery level. Thus it is very important to understand that the text books are medium for reaching the destination goals. It is rightly said that, "A textbook should not be a master to be feared, but should be rather a servant to be ordered."

Thus, the textbook of Social Science is concerned with the social aspect, of life in its wider sense of the word. In academic as well as physical aspects, the books should possess the qualities discussed above. Besides this it posses few more qualities like

1. The text book writer of this subject is expected to be fully aware of things all round the learners. He should be busy in modifications and revision of the book every now and then in this age when we are seeing a large number of changes almost in everything.

2. As far as subject matter of Social Science book is concerned, it is expected to deal with the environment of the learners very thoroughly.The subject matter has to be up to mark and up to date in every way.

3. Since, the main purpose of Social Science is to reveal to the children where they are in time, space and society. Contents dealing with all these things have to be there in the book in a very systematic way.

6.11 LESSON END EXERCISE

Short Answer Type Questions

1. What do mean by text book of Social Science?
2. Why do we need text book?
3. Give definition of text book.

4. How text book of Social Science is helpful for students?
5. Give characteristics of text book.

Essay Type Questions

1. Discuss the importance of social studies textbook.
2. Explain the qualities (criteria) of good social studies textbook.
3. Point out the limitations in using social studies textbook. Give your suggestions for effective use of social studies textbook.
4. Explain the essential characteristics of good social studies textbook.
5. Explain the meaning and purposes of social studies textbook.

6.12 SUGGESTED FURTHER READINGS

Jha, S.A.(2011). Teaching of Social Science. New Delhi: APH Publishing Corporation.

Sharma, R.A. (2004). Teaching of Social Science. Meerut: Surya Publication.

Sharma, R.K. (2008). Teaching of Social Science. New Delhi:Lotus Press. www.lotuspress.co.in

Sharma, P. S. (2011). Teaching of Social Science (Principles, Approaches and Practices. New Delhi: Kanishka Publishers, Distributors, kanishka_publishing@yahoo.co.in

Ruhela, S.P. (2019). Teaching of Social Science. New Delhi: Neelkamal Publication Pvt. Ltd. www.neelkamalbooks@gmail.com

6.13 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress- 1. 1 True, 2. True, 3. True, 4. False, 5. True, 6. False.

Check Your Progress-2.1 (d), 2. (d), 3. (c), 4. (d), 5. (d), 6. (c).

****

LESSON NO. 7 UNIT–II

CO-CURRICULAR ACTIVITIES

7.0 STRUCTURE

7.1 Introduction

7.2 Objectives

7.3 Meaning of Co-Curricular Activities

7.4 Importance of Co-Curricular Activities

7.5 Steps for organizing Co-Curricular Activities.

7.6 Role and Organization of the following in Teaching of Social Studies: Debates and Quizzes.
Excursion.

Visit to Museum. Supervised
Study. Dramatisation.

7.7 Let Us Sum Up

7.8 Lesson End Exercise

7.9 Suggested Further Readings

7.10 Answers to Check Your Progress

7.1 INTRODUCTION

Education is the all round development of the personality of the child. All round development means intellectual, physical, social, emotional, moral development. All round development can be achieved through participation in both curricular and co- curricular activities. Co-curricular activities those which are undertaken side by side with the curricular activities. Co-curricular activities are essential part of school life and help in enhancing learning process of students at school. These activities supplement class teaching and enhance students interest in the subject. A number of co-curricular activities can be organised by the teachers for the enhancement of their students knowledge and interest and for their all round development. In this lesson, we shalll discuss the concept of co-curricular activities, their importance, steps for organising co-curricular activities and their role in teaching of Social Science.

7.2 OBJECTIVES

After going through this lesson, you shall be able to :

- explain the concept of co-curricular activities.
- describe importance of co-curricular activities.
- discuss steps for organizing co-curricular activities.
- discuss role of various co-curricular activities in teaching of social studies.

7.3 MEANING OF CO-CURRICULAR ACTIVITIES

Co-curricular is adjective form of the Latin Word Curriculum which means 'course'. Previously theoretical subjects like History, Math's, Language etc. only formed the curriculum of study. Activities like games, debates, social service, excursion, etc. were considered to be extra and hence called Extra-Curricular Activities. But nowthese activities have been recognized as a part of regular Curriculum for the complete education of the child. These activities have now been named as co-curricular activities. In fact, curricular and co-curricular activities are now considered complementary to each other both deserving equal weight and emphasis. Hence, activities that are performed outside the classroom are termed "Co-curricular activities". In other words education that is imparted to the children for their development outside the classroom is called co-curricular activities.

Before we discuss the need and importance, let us mention a few activities which help in learning social studies. These activities include, Debate and Discussion, Symposium, Story Writing Competition; Dramatics, Brain Trust, Organizing Literary Club, exhibitions, Preparation of charts and models; Assembly, Celebration of festivals,fairs, national and international days, etc.

The co-curricular activities have immense value for the pupils. These activities have physical, psychological, ethical, cultural, aesthetic, civic, social and academic value. The advantages of co-curricular activities are varied and numerous. Their educative functions are so important and necessary that we cannot do away with them. These activities help in the achievement of socialization, development of moral qualities, respect for law and order, awareness towards political goals like democracy. These activities develop social qualities and the qualities of leadership. Co-curricular activities develop the qualities of democratic way of life, feelings of co-operation. Besides, theycontribute to mental and emotional health of the students. These activities also provide an outlet to the emotions in the playfield or any other activity. These activities awaken cultural interests and foster respect for social taboos of society without any fear of punishment. Co-curricular activities offer unsurpassed experience in working and learning together. Thus, activities are an important part of effectivesocial studies programme.

7.4 IMPORTANCE OF CO-CURRICULAR ACTIVITIES

Co-curricular activities are of immense value in the present day school curriculum. There is numerous values (advantages) of co-curricular activities which are given below:

1. Physical Importance: Co-curricular activities like games, sports, athletics, mass drill,

N.C.C., A.C.C., etc. improve the health of the students such activities directly contribute to physical strength, vigour and endurance and provide physicalvitality, physical fitness.

2. Psychological Importance: Co-curricular activities satisfy the psychological needs of the pupils. Some of the psychological values of co-curricular activities aregiven below:

i) Sublimation of instincts: Co-curricular activities are the best means of chanalizing the child's instincts into healthyand fruitful channels. They are in a way a 'safety valve' for the surplus energy of the pupils. Various instincts like instinct of curiosity, pugnacity, constructiveness, gregariousness, self-assertion, self-abasement and find healthy outlet for express and are sublimated through these activities.

ii) Training of emotions: Co-curricular activities help in providing outlets to emotional energy. They play an important role in the training of emotions. They provide opportunities for expression of emotions. The catharsis of pent up emotions is performed by means of all types of activities and games. The complexes formed in the class atmosphere are relieved in the open air of the playground, and farm. It is said that "An empty mind is a devil's workshop." If children will be engaged in co-curricular actives their energies will not be misdirected.

iii) Development of healthy sentiments: Co-curricular actives in the creation of many wholesome sentiments, such as the group sentiments, the sentiment of social service and the sentiment of loyalty. Tournaments and activities like school functions foster these sentiments.

iv) Satisfaction of interests and aptitude: Co-curricular activities prove helpful in the satisfaction of interests and aptitudes and thus reduce the chances of dissatisfaction and frustration to a great extent.

v) Development of capacities and talents: Capacities and talents of the pupils are developed to the maximum by participation in diverse types of activities which suit their interests and aptitudes. Various capacities and faculties like verbal, intellectual, social, vocational and aesthetic can be catered throughdifferent co-curricular activities like writing, libraryreading, dramatizing, playing and organising functions. Sometimes these activities act as a determining factor for the choice of vocation for the future life.

vi) Development of character: Every item of the school programme in which the pupil participates intelligently helps in developing his character as the pupilsthemselves make laws for various activities and societies, they become trained

in self-discipline. They maintain a standard of conduct, work and learning. They receive training in co-operative work, in social service and in mutualgive and take.

vii) Development of sound mental health: Co-curricular activities have provedto be a potent

means of sound mental health and development. Whereas their absence may lead to various types of maladjustments, their practicing maymean adjustment in all the cases.

3. Moral and spiritual importance: Co-curricular activities encourage moral and spiritual development. Every ounce of moral experience is worth a pound of ethical teaching. Co-curricular activities provide ample opportunities for the inculcationof moral and spiritual qualities. Qualities like honesty, truth, justice and purity are developed through morning assemblies, prayers, self-government, celebration of birthdays of great men and social service activities.

4. Civic Importance: Students' self-government, school assemblies, visits to civic institutions and celebration of social, religious and school festivals have significant effect on the development of citizenship among the students of the school. They are the best method for training pupils for their rights and duties as citizens. They give an opportunity for the development of true spirit of citizenship. They develop in the child a spirit of toleration of others views, healthy exchange of ideas without provocation, graceful followership, not being puffed up with victory and accepting defeat with grace. All these are civic virtues the lack of which lead to imbalance in the society. Students learn many lessons in the art of governing and of being governed.

5. Social Importance: Pupils learn manners and become conscious of their role in the group by participating in co-curricular activities. These activities give them the training of living in the society. They teach them the art of social living. Through these activities pupils get training in the habits and graces of social life. They develop the qualities like fellow feeling, sincerity, good temperament and discipline - all of them are the essential features for a healthy social life. It also develop the habits of group participation and team work which are essential to live happily in society. Through these activities they learn the relation of the individual and the society. These activities have a social appeal. They are a significant social medium for the civic training of the young.

6. Cultural Importance: Activities like dramas, exhibitions, excursions, visits to museums, and celebration of religious, social and national festivals to portray our cultural heritage and traditions and thus provide opportunities for the better understanding of our culture. The establishment of a social studies museum in school is very effective for awakening cultural interests and fostering cultural tastes.

7. Aesthetic Importance: Co-curricular activities like drawing and painting, preparation of charts and models, dramatization, exhibitions, excursions and visits to various places have social significance for developing the aesthetic aspect of personality of the pupils. The development of fine tastes and aesthetic sensibility is one of thechief functions of education. Aesthetic sensibility is a fine feeling for beautiful objects and ideas. Perhaps, aesthetics leads to Truth, and "Truth is beauty and beauty is truth". Keats remarked, "Athing of beauty is a joy forever." Mere lecturing would not help in aesthetic development. It will grow only out of experience. These co-curricular activities provide a rich variety of experiences, where fine and aesthetic tastes aredeveloped.

8. Disciplinary Importance: Through participation in co-curricular activities, the students

learn the value of discipline. They become self disciplined.

9. Recreational Importance: Co-curricular activities like debates, declamations, competitions, exhibitions, excursions and visits provide enjoyment and healthy recreations.

10. Leadership Importance: "The battle of Waterloo was won at the play fields of Eton" is an important saying. Different Co-curricular activities provide ample scope for the training in leadership. Every activity organised in the school requires a leader from the students for its organisation. In this way various activities organised from time to time provides numerous opportunities for leadership.

11. Other points of Importance: Some other points of importance of co- curricular activities can be listed as (i) Cordial relations between the community and school, (ii) Earning while learning, (iii) Preparation of a vocation, (iv) Assistance in guidance and counseling.

7.5 STEPS FOR ORGANIZING CO- CURRICULARACTIVITIES

The following guiding principles are helpful in organizing the co-curricular activities in more meaningful, more interesting and more useful manner:

1. Principle of Selection: Co-curricular activities should be carefully selected. While selecting co-curricular activities the following points should be kept in mind:
   - i) Variety of activities
   - ii) Economical activities
   - iii) No multiplication of activities
   - iv) Educative activities
   - v) Free choice of activities
   - vi) Means not ends
   - vii) Needs of the school and the pupil
   - viii) Balanced selection
2. Principle of Providing Time and Place: If pupils' attention to co-curricular activities is to be adequately secured these activities must be assigned an honorable place in the regular school programme. In the fitness of things, 'activity periods' should be provided in the school time-table and place of each activity must be specified. As Mohiyud-din has remarked, "By inclusion of these activities in the regular time-tables of our schools, not only opportunities would be provided for all pupils to participate in social experience and gain valuable training in the practical arts of citizenship, but the status of these activities would also be raised to the level of curricular pursuits." Many State Governments have enforced 'activity periods' in the school time table.
3. Principle of Providing Motivation: Pupils should be motivated and encouraged to participate in co-curricular activities. In view of significant educational values, it is

necessary that every pupil should participate in some activity. The following suggestions are offered for motivating and encouraging the pupils:

i) Providing list of activities

ii) Encouraging initiative

iii) Providing democratic opportunity

iv) Democratic organization

v) Defining the aim

vi) Giving due credit

4. Code of Rules: Every organization should have a written constitution or code of rules specifying its objectives, membership, method of electing office-bearers and other necessary details. It is essential that it should be sponsored by the staff member and patronized by the head of the institution.

5. Principle of Guidance and Advice: Guidance and advice should be made available to pupils for the proper selection and organization of co-curricular activities. In the words of Secondary Education Commission, "While the students should be encouraged in every activity to stand on their own feet and develop these activities through their own initiative, the teachers should be at hand to help and guide them so that their educative possibilities may be fully exploited and they may ensure that students take part in one or more of these activities". Hence for the proper organization and conduct of these activities, there should be provision for direct association of the members of the staff as advisers. The adviser should possess the following characteristics:

i) Sympathetic attitude

ii) Tactful person

iii) Enthusiastic person

iv) Dedicated person

v) Special knowledge and skill

6. Principle of Due Publicity : Due publicity and recognition should be given to these activities. The community should be informed about the activities.

7. Principle of Maintaining Records : Record of various activities must be kept by every organization. Every organization should make a record of various activities, participation of students, and statement of expenditures, evaluation of the programmes and in the form of annual report.

8. Some General Suggestions : Besides above principles, the following general suggestions should be observed :

i) Gradual growth of the programme
ii) Careful consideration
iii) Participation of large number of teachers
iv) Judicious distribution of duties
v) Incentives for teachers
vi) School ideals and practices
vii) Inviting community
viii) Freedom and responsibility
ix) No much financial burden
x) Balance stress
xi) No unnecessary expenditure
xii) No show work
xiii) Training to advisers
xiv) Evaluation

7.6. ROLE FOR ORGANIZATION OF THE FOLLOWING IN TEACHING OF SOCIAL STUDIES:

(1) Debates and Quizzes Meaning:

A debate is a form of literary discussion rich in arguments in which one or more students present the views for and against a particular topic. He is required to convince the audience and the opponents by the force of his arguments. He has to present his case with confidence and in an interesting manner.

Difference between Debate and Declamation:

In declamation there are many topics, whereas in debate there is only one topic and all the speakers speak on the same. The topics for declamations need notbe controversial. The speech must be pregnant with ideas and not arguments as in the case of debate.

Importance/Aims or Advantages:

1. Linguistic Importance (value): Debates, discussions, declamations and symposia increase the linguistic ability of the speaker, as he widens his scope of knowledge, enriches his vocabulary and gets training in different styles of oral expression. Incidentally, he improves

his pronunciation, intonation and oral expression.

2. Intellectual Importance (value): Debates, discussions, declamations and symposia are helpful in clear, logical, vigorous and original thinking. They provide the best means for self-expression. They get training in argumentation, discussion and oratory. They help in maintaining self-confidence, resisting against stage fear andnervousness, mustering courage on the stage and maintaining presence of mind.

3. Organizational Importance (value): Literary activities like debates, discussions, declamations and symposia train the pupils in the art of selecting material and organization of ideas, speaking effectively and convincing with the advancearguments.

4. Vocational Importance (value): Debates, discussions, declamations and symposia have vocational value. Training in discussion, argumentation and oratory is important in later life especially in certain vocations like teaching, pleading and public leadership. Effective speaking is the first qualification of a public leader.

5. Convincing Importance (value): The debator has to convince the audience about the correctness of his views. Formal debating is a skillful and difficult art, and those who are successful in mastering it acquire a powerful instrument for influencing and guiding the action of their fellows.

6. Disciplinary Importance (value): Debates, discussions, declamations and symposia impart the training of hearing others also. The pupils learn how to listen patiently even to adversaries and how to analyze the contents of a speech.

7. Emotional Importance (value): Debates and discussions play a significant role in the training of emotions. Theyhave a cathartic effect on the emotions of children, as they purge out the pent up emotional energy.

8. Instinctive Importance (value): Various instincts like instinct of self- assertion, instinct of curiosity, instinct of gregariousness find worthyoutlet of expression and are sublimated through debates, discussion, declamations and symposia.

While emphasizing the importance of debates and other oral activities H.C. McKown remarked, "As a developer of intellectual interests and capacities, fluency to expression, clear and discriminate thinking and increased ability to appreciate the important affairs of modern life, good sportsmanship, self-reliance, self-confidence, poise and similar desirable quantities, it has few equals in schools."

Steps for Organizing Debates:

1. Selection of Topic: Social studies teacher should make a judicious selection of interesting and useful topic. The topic should emerge out from the courses of study prescribed for the debaters. The more relevant the topic for the debate is to the prescribed course, the more it should be covered. The topic for debate must be an interesting one, capable of stimulating thoughts. It should give rise to controversialarguments.

2. Proper Planning: Debates must be properly planned. The date, time and place for the debate should be notified. The topic must be announced well in advance. The number of speakers and the time given to each speaker should be specified. The technical points such as how to open the debate how to conclude and how to judge should be well attended to. The teacher should ensure that students are fully prepared. Unless the students have sufficient background of the topic, little can be accomplished. Judges must beappointed.

3. Encouraging Maximum Participation: The teacher in-charge must encourage maximum participation in a debate.

4. Teacher's Guidance: All debates must be guided by the teacher. The speakers must be guided regarding references and source material. They should be guided during the preparation in the selection of material and presenting of arguments for or against. Theymust be trained to reply the arguments of their opponents instantaneously. They must be discouraged in cramming up written drafts or speeches. Instead they must be helped to jot down points and to elaborate the same. They must be guided as how to open and conclude the debate. The language should be flowery, briskly, clear and effective. Humor and light ridicule is the sauce of such speeches. The true spirit of debating should be developed among the students. No opponent should be insulted.

5. Conducting the Debate: The number of speakers, time allotted and the opener of the debate may be written on the blackboard so that it is visible to all. Sofar as the actual conduct of the debate goes on, responsibility is snared by the chairperson (teacher-in-charge) delegating much of it to the debater. The chairperson keeps the debate away from rambling. Debate should be conducted with integrity. It should be properlyconcluded.

6. Follow-up and Evaluation: The debate is then followed-up and evaluated in its right perspective. The criteria for evaluation may be fixed up in clear cut terms such as:

(i) Did the speakers stick to the topic?

(ii) Were the speakers' objectives in their arguments?

(iii) Was there a shortage of facts and valid evidence?

(iv) Will the debate lead to a greater maturity of the debaters in future debates?

Organization of Thought-Provoking Programmes like Quizzes.

Organization of a few important thought-provoking programmers like quizzes and wordd searches as a part of the co-curricular activities in social studies may be quite effective in the realization of the stipulated aims and objectives of social studies teaching in our schools. Let us try to know about them and theirorganization.

What are quizzes and work searches activities.

The type of competition involving an immediate verbal responding to the questions put in the open session of an assembly on the part of the members of the two or more participating teams

seated on the stage by making ability is termed as quiz. However, when such responding is limited to a mere word search then the competition is named as word search competition.

The Procedure of its organization :

A question arises that how should the quiz and word search competitions be organized as to emerge as a powerful and effective co-curricular activity contributing toward the effective realization of the aims and objectives of social studies teaching. We may find a variety of forms and styles available for their organization. However, in thepages to follow, we are presenting a relatively functional and practicable approach for its organization particularly in reference to the teaching and learning of the subject social studies. We can set the stage for the quiz or word search competition in the assembly hall or in the social studies room itself it is capable or accomodating therequired strength of the participant teams, the faculty members and the teaching staff of the school the members of the social studies club and other students of the school. For the conduct of the activities and proceedings of the competition, the person responsible for the stage conduct may be assigned the additional responsibilities or it may be given to some other teacher or even to a capable student. The person conducting the proceedings of the competition often named as quiz master then can proceed on the lines described in the following:

He initiates the activities of the quiz competition by describing the process to be adopted for conducting the competition. Proceeding further he tries to explain all the rules and regulations to be followed bythe participant teams and he individual members of these teams. As an example, his initiation on this account may run as follows.

1. In this competition you will have to answer certain questions. These questions are specificallymeant to test the level of your comprehension and understanding of the knowledge, skills and applicant related to the facts and principles of the subject social studies.
2. Beginning is to be made by putting a particular question before the participant teams. It will be a multiple choice type questions javog four alternatives in the name A, B, C and D. You can view it properly on the screen. For your conveniences and clarity it will also be narrated verbally in a proper way. You will have to seek your answer from the given four alternatives. (The decision regarding the styles of the format of the questions asked in the competition should be always taken beforehand and it should be properly conveyed to the participant at the beginning of the competition.)

Please Note :

However, it should also be clearly known to the organizers of the competition that it is not necessary to keep the format of the questions only as multiple choice. Participants may also be asked the short answer type questions without providing any suggestions or alternatives for their responding. In this way, there may be varying types of question to be asked in the quiz competition incorporating the following three types of format.

Format - I

1. When did Alexander the Great invade India?

   (a) 350 years B.C. (b) 326 years B.C. (c) 328 years B.C. (d) 226 years B.C.

2. What was the real name of Buddha, the propagator of Buddhism?

   (a) Gautam (b) Sidharth (c) Tathagata (d) Bodhyan

Format - II

1. How many years before the birth of Christ, Alexander the Great invaded India?

2. Name the state of the capital Agartala.

Format - III

1. The place where the river Ganga and Yamuna meet is _____

2. The origin of the Indira Gandhi Canal lies in the river_____

In this connection it is also important to mention that while it is proper to make use of the former two types of the above mentioned formats for asking questions in the quiz competition, the third type is highly favoured for being used in the worked search competitions.

3. As soon as a particular question related to the quiz competition is put to the competitors, they are required to respond promptly and immediately. There may be a number of ways that can be adopted by the responding participants for putting their response. Let us reproduce some of these alternatives as follows :

- The question will be addressed to a particular team sitting alphabetically / coded sequence or in any sequential order. If it responds correctly, it will be awarded 10 marks. In case it is unable to answer or is incapable to providing the correct answer, then the question will forwarded to the team sitting next.

  This team will be awarded 5 bonus marks of its correct answer. In case it also does not respond correctly then the question will automatically go for responding (and getting 5 hours marks) to the next team/ teams sitting in the serial order, and so on. In case of failure on the part of all the participating teams the question may be put to the audiences for responding.

- In its second alternative the question put will remain open to all the teams for responding. Each participatory team will have a ringing bell/buzzer or red light electric switch at its control that can be used byit for immediate responding to the question and in case it responds correctly, it will be awarded 10 marks. However, if it responds incorrectly then a

penalty of 5 marks for its incorrect response.

- The organizers of the competition will have as many parallel sets of the quiz questions with them as there are the teams present in the competition. Now each team sitting in some order will be invited one by one for responding to the one of the sets allotted to it through lottery system. Each correct responding on its part will be rewarded by 10 marks and thus total of the marks earned by a team will be used for the merit ranking of the team in the quiz competition. In case a question is responded incorrectly by a particular team during its turn of responding it will automatically go to the next team in order and the correct responding on its part will be rewarded by 5 bonus marks.

4. The questions will be presented verbally only once before the participating teams. However each of them will remain on the screen untill a correct response is procured from the participating teams.

5. The rules and regulations framed for the competition will be observed strictly by the competing teams, organizers and the judges for the success of the competition. It remains always better to issue a clear warning that non-observance of these rules may get a team out from the competition.

6. The latest scores of the participating teams may be displayed from time to time on the screen or remain reserved with the panel of judges till the declaration of the results. At the end of the competition it can be declared in the form of result by one of the judges from the panel with some expert comments on the standard of the performance of the participants.

7. At the end, the winning teams and the individual participants will be awarded prizes and certificates by the chief guest or the head of the institution.

Advantages of quizzes and word search competitions :

In view of the realization of the objectives of social studies teaching, the organization of the activities like quizzes and word search may carry the advantages as follows :

1. It helps in the acquisation of knowledge, understanding, skills and application of the facts, principles, events and processes related to various topics and learning experiences related to the subject social studies.
2. The participants on the part of the students may provide them all the necessary inspiration, incentives and motivation for getting information with their self- efforts from libraries, museum, social studies laboratories and resource rooms.

3. The need for participating in these competitions helps the students in promoting among them the habit of independent and intensive studyof the subject material of social studies.

4. It may become a potential source for the acquisation of varying types of knowledge and understanding about the subject material of social studies in the play-way spirit.

5. It helps in the development of desired interests, attitudes and aptitudes among the students for the proper knowledge and understanding of social studies.

6. It helps in the development of group feelings, co-operative spirit and other essential qualities related to the promotion of sociability and civic virtues among the students.

In this way, if well-meaning attempts are made for the formal organization of co- curricular activities like quiz and word search competition based on the subject material of social studies by dividing it into suitable units, sub-units and small sections covered and followed by the able guidance and follow-up of the social studies teachers, then there remains no doubt of the constuctive contribution of these activities the success of the classroom instructional work. Indeed, there is no parallel of these activities with regard to their contribution towards the practice, application and fixation of the knowledge, understanding, and skills of the subject social studies, and in this way, the organization of these activities can help a lot in the proper realization of the teaching and learning of social studies. This is why, a social studies teacher should always look for the organization of social studies club.

(2) Excursions (Field Trips)

Educational excursions or field trips are organized for various school and college subjects like geography, history, civics, economics, commerce, agriculture, nature study etc.

Rein introduced the technique of educational excursions or field trips in 19th century to make social studies (history, geography, economics and civics) more motivating, interesting and realistic. This technique can be effectively used in social sciences studies. These excursions or trips provide the students with opportunities to have direct experiences out-of-school life. These are the very effective devices of teaching social studies which give both adventure and experience to students. They add to students' information and provide valuable experience to pupils at every stage of learning from childhood to maturity. Students get firsthand knowledge of how man is provided with different amenities of modern life through visit to a bank, a court, an airport, a seaport, a factory, a mill, a dam, an irrigation project, a telephone exchange, a market place and a museum, etc.

Types or Examples of Field Trips:

1. Historical Excursions: Historical excursions include trips to forts, temples, caves like (Ellora and Ajanta), monuments, tombs, archeological ruins and other local historical places.
2. Geographical Excursions: Geographical excursions include visits to factory, business centre, bank, office, dam, power house, coal mine, river, zoo, museum, lake, valley, forest, port, seaport, airport, mountain or hill top, waterfall, glacier, etc.
3. Civic and Social Excursions: Civic excursions include visits to gram panchayat, zilaparishad, district court, high court, Supreme Court, legislative assembly, parliament house, Rashtrapatibhawan, Governor's house, etc.
4. Commerce and Economics Excursions: These include visits to industries, factories, mills, stock exchange, bank, business establishment, food grain storage, etc.
5. Excursions of Scientific Interest: These excursions include visits to power station, printing press, national laboratory, All India Radio, T.V. Station, Telegraph office etc.
6. Educational Excursions: These include visits to other types of educational institutions like deaf and dumb school, blind school, and technical training institute, vocational or professional institutions.

Characteristics of Educational Excursions/Field Trips:

1. Firsthand Knowledge: They provide the first hand knowledge or information about the teaching contents and objects.
2. Real Experiences: They provide the real experiences and perception of content.
3. Interesting: They make social studies, history, geography, economics, political science, sociology and other subjects interesting and realistic.
4. Permanent Learning: Excursions/field trips provide the real experiences which are easily retained for a longer time.
5. Freedom in Learning: They provide freedom in learning (self-learning) outside the classroom.
6. No Rote Memory: They reduce the scope of rote memory and help in meaningful learning.
7. Psychological Technique: They involve more senses in learning situations and therefore, a psychological technique.

Rationale (Theoretical Principles) of Educational Excursions/Field Trips:

Educational excursions are based on the following principles:

1. Psychological Principles: They are based on psychological principles like observation, perception and understanding. They involve more senses.
2. Social Principles: They are based on social principles and feeling of cooperation, group work, team work and fellow-feeling.
3. Group-Centered: They are group-centered instructional technique.
4. Aesthetic Sense: They develop aesthetic sense i.e., ability to appreciate and praise natural places or spots.
5. Direct Contact: They provide the direct contact with real content of teaching school subjects.
6. Real Learning Experiences: They are based on real learning experiences outside the classroom by observations, imagination and inventions.

Importance, Purposes and Advantages of Excursions (Field Trips):

1. Acquaintance with Environment: Excursions or field trips enable the students to know intimately their environment by putting them in direct contact with things, places, persons, organizations and institutions. They gain experience and thereby knowledge. They become interested in the exploration of their environment.
2. Supplementary Class-Work: Visits to valleys, caves, forests, mountains, forts, museums, temples, factories, mines, dams, rivers, canals, libraries and laboratories help in supplementing the teaching of relevant topics. Students gain first hand information and direct experience which give clarity and vividness to the 'dull and dead matter' of various topics and provide opportunities for valuable correlation of topics.
3. Developing Qualities of Leadership: Excursions help in developing qualities of initiative, resourcefulness, self-confidence and leadership in the students by providing those opportunities to make necessary arrangements.
4. Developing Quality of Co-operation: When the students go for excursions in groups, they become more co-operative with each other. In fact the whole group is changed into a family and each member of that family feels that he must help others. Spirit of unity is developed among the students.
5. Developing Aesthetic Sense: Excursions to the places of natural beauty create love for nature and develop the aesthetic sense of the students. They learn to appreciate truth, beauty and goodness.

6. Developing Activity Among Students: Excursions make the students the active recipients of knowledge. The passivity which they acquire in their dull routine work is replaced by activity by these excursions.

7. Developing Emotional and National Integration: Educational tours to others state foster a spirit of unity and oneness. The students develop contacts with the people of other regions and states. They realize that, Inspite of so many differences of castes and languages, their country is one.

8. Introducing Variety: Excursions introduce variety in the school programme. They take the students away from the regular school life. Through excursions, their mood is changed by going into the lap of nature or vigor of natural life. Excursions give them some relief from the dull and monotonous life of the classroom.

It should be noted that well placed, well co-ordinate and well conducted excursions revolutionize the teaching of social studies.

Steps for Organizing Excursions (Field Trips):

1. Planning, Preparing and Executing: The following steps are used in planning, preparing and executing educational excursions/field trips:

(i) Formulating Objectives: The foremost step in planning educational excursion or field trip is determining the specific objectives to be attained.

(ii) Planning in Advance: Judicious and thorough planning must be made well in advance.

(iii) Planning the Activities: Activities should be planned and organized so that the objectives can be achieved effectively.

(iv) Selection of Place: The selection of place of excursion must be made taking into consideration the educational and recreational value, the distance and time of travel, the age level of students, the climatic conditions, and the availability of lodging and boarding facilities, reservation of railway accommodation or transportation, and other allied matters. The place selected should yield the maximum educational benefit. The distance of the place to be visited should be reasonable and the expenses of excursion must suit the pocket of every student joining the excursion/field trip. It should not be very expensive and time consuming. Usually the undertaking of a single day excursion to a nearby place is to be preferred. But occasionally longer excursions to more distant places are not ruled out.

(v) Permission:

(a) Permission for excursion should be taken in advance from the head of the institution for organizing field excursion/field trip.

(b) Permission to see farm, factory, mill, dam, fort, cave, monument, tomb, archeological ruin, zoo, museum, television station, art gallery, legislative assembly, high court, supreme court, etc. mayalso be sought in advance from the manager, the incharge or the head of the organization concerned so that there is no difficulty at the eleventh hour.

(vi) Preparing Students: The teacher in charge should prepare the students for field trip. He should motivate the students for the trip by highlighting itsimportance.

(vii) Preparing Schedule: A schedule is to be prepared for the excursion/field trip: (a) Date, (b) Time, (c) Number of students, (d) Incharge of the excursion (field trip), (e) Specific programme for the excursion, (f) Financial assistance.

(viii) Preparing Guideline: A guideline and a schedule paper is to be prepared for every student. Aguide sheet should show the schedule for visiting places and objects.

(ix) Preparing schedule for boarding and lodging: Incharge of trip has to prepare schedule for boarding and lodging at different places during the field trip.

(x) Formation of Committee: Organization of excursion or field trip is not one man's job. Both the teachers and students should shoulder responsibility in it. Let it be a democratic way of doing. A committee of teachers and students should be formed to make all the preparations and to look after the comforts and convenience of the students.

(xi) Preparing List of Items: A list of required items is prepared for the journey.

(xii) Specific Instructions: The specific instructions are given for the starting place and time.

(xiii) Preparing Code of Conduct: Incharge of the trip with the help of members of the trip committee has to prepare code of conduct which every student has to follow during field trip or excursion.

(xiv) Appointment of Group Leaders: Group leaders should be selected from the students who have the capability to explain to others and can also handle them well. They should be assigned specific responsibilities in connection with the excursion. It is better if the group leaders possess prior information about the place of excursion and about the things to be seen. Some pictures, guide books, location etc. maybe utilized if available. Literature about the place should be gathered before and students should be allowed to have free access of the same. The appointment of group leaders facilitates

work to a considerableextent. The entire work should be divided among workers and group leaders. The teacher teaching social studies may devote sufficient time to give requisite directions for the organization of excursion.

(xv) Formation of Special Committees: Special committees should be formed with the explicit function of musical performance, singing, photography and such other recreations, reservation of seats, boarding arrangements etc. As excursions are arranged for educational- cum-recreational purposes, student singers, tit-bit tellers and as: photographers should find a place in the party so that learning and laughing should go hand in hand.

(xvi) Proper Budgeting: Proper budgeting should be done and economy should be observed.

It should be noted that planning also includes physical details of the trip such

(i) The route

(ii) Transport

(iii) Arrangement of meals

(iv) First aid box

(v) Collection of data

(vi) Records and reports

(vii) Students' responsibility and conduct

(xvii) Explanation by Teacher: During the visit, the teacher should explain most of the things in detail. He should also provide time to students for necessaryquestions. He should assist the students in seeing the relationship of each detail.

(xviii) Maintenance of Discipline: The maintenance of discipline during excursion is very important for its success. Therefore, it should be the keyword in conducting the excursion. Loose discipline will lead to failure of the activity. Hence care should be taken that proper discipline is maintained. The teacher-in-charge should handle the situation very wisely and should be able to set things in a democratic way. Lady staff member should be incharge of girl students.

2. Follow-up Activities: Definite follow up activities also form an integral part of any well arranged excursion. The follow up may take the form of:

(1) General group discussions on the trip.

(i) Reading books on the places observed.

(ii) Writing reports or descriptive accounts. Relevant photographs taken during the trip should find a place in the report.

(iii) Preparing scrap books.

(iv) Preparation of charts, models, albums etc.

(v) Preparation of suggested further reading in library.

(vi) Displaying collected materials and souvenirs.

(vii) Arranging film shows relating to the trip.

(viii) A talk by a qualified person on the visited area.

(ix) Taking objective test relating to the trip.

3. Evaluation and Recording: Evaluation should be made at the end of each excursion so that its next venture may come out to be better than the earlierone. (i) Excursions should be evaluated in terms of the originally established purposes. (ii) Mistakes and difficulties should be diagnosed. (iii) Conduct of the group should be discussed. (iv) Letters of thanks should be written to the persons concerned. (v) Highlights of the trip should be recorded in permanent form for future use.

Limitations of Excursions/Field Trips:

1. Costly: They arecostly.
2. Time Consuming: They are time consuming and energy consuming.
3. Non-Participation of Poor Students: The poor students cannot participate in the excursions/field trips.
4. Limited Use: They cannot be used for most of the topics of social studies/ social sciences like history, geography, economics, civics, sociology, etc.

(3) Visits to Museums

Museum is a place of study and centre for recreation. Museum, the temple of the 'Muse' as the word implies contains non-reading material which play avery significant role in the teaching of social studies. Many of the materials available in the museum present

information which is difficult to obtain through reading. Such materials add realism and furnish the class with a common background of experience. For ages, the museum has been regarded as the reference file of real objects by which to verify and amplify knowledge acquired and preserved in other forms.

Importance and Objectives of Museum

i) Describing the importance of museums, the Secondary Education Commission Observed:

ii) "Museums play a great part in the education of school children as they bring home to them much more vividly than any prosaic lectures, the discoveries of the past and the various developments that have taken place in many fields of science and technology."

iii) The museum as a repository of objects of historical and cultural significance plays a vital role in the teaching of social studies.

iv) Instructions through visits to museum containing historical and cultural objects are becoming increasingly popular as it imparts wholesome education.

v) The museum as a place of accumulation, preservation, classification and reference is essentially an institution for proper education.

vi) Museums have been responsible for throwing the light on social, cultural and artistic progress of the world. The collections in the museums have made social studies a live subject and have given new impetus to teaching methods.

vii) The potentials of a museum can be effectively exploited for fostering education on national and historical lines. It can also be effectively used for developing international understanding which is one of the aims of teaching social studies.

Need of Museums

xi) It is desirable that every school should have a social studies museum which should have different sections-local, national and international. Stamps, coins, flags, minerals, pebbles, rocks, cereals, fibers, plants items of sculpture, ancient tools, etc. have great advantage over pictures, films; and models in that they are a reality. Pupils should be encouraged to collect such specimens and the school should provide facility for display and storage either in the social studies room or even in the corridor. In this way, we can built a social studies museum. Visits to the nearby museum will always be welcomed by pupils both for illuminating their lessons and in the development of their own social studies museum. The organized class visits to the museum have been the accepted practice in most

European Countries. Instructions through visits to museums is becoming increasingly popular in all progressive countries of the world. In most progressive countries, the museum is being recognized as an instrument of public education with vast potentialities.

Check Your Progress-I

Note: (a) Answer the questions given below .

(b) Compare your answers with those given at the end of the lesson.

1. Curricular is adjective from of the_____word curriculum which mean course.

2. Co-curricular activities improve the _____experience of the students.

3. Co-curricular activities help students to overcome.

4. Arranging excursions, field trips and educational tours is now considered as an essential part of _____.

5. A debate is a form of_____ __discussion.

(4) SUPERVISED STUDY

Supervised study is a useful teaching device of social science. It means self-study by the student on the assignment under the supervision of teacher who also provides guidance if need be. Supervised study includes all those activities that have to do with active learning through planned efforts. The supervised study may be conducted in the social studies classroom, in the library, in the laboratory, or in whatever setting it may be appropriate. The teacher while conducting supervised study is an observer, a helper and a true guide. When the students meet a difficulty that they cannot overcome, they ask the teacher for direction, assistance and guidance. The teacher, when not called upon, walks quickly in the classroom but always available at the pupils' desks, watching the pupils do their work, continually on the alert for any wrong producers that they may follow. He is always ready to direct and help them. The students can read, write, review or interpret in silent work. The teacher should detect difficulties and weakness of the students and help them to overcome the same.

Some definitions regarding the meaning of supervised study are given below:-

- Definition of Maxwell : "Supervised study is the effective direction and overseeing of the silent study and laboratory activities of the pupils".
- Definition by Bining and Bining : "Supervised study is the supervision by the teacher of a group or class of pupils as they work at their desks or around their

tables. In this procedure we find pupils busy at work that has been assigned to them by the teacher".

An analysis of meaning of supervised study reveals the following

Characteristics of Supervised Study:

i) Self-Study: Supervised study is the self-study by the student on the assignment given by the teacher.

ii) Directed Procedure: Supervision is a sort of directed study procedure. Effective direction is given by the teacher.

iii) Teacher's Supervision : The teacher supervises or watches the students when they are studying or doing work in the class, may be in the laboratory. The students learn certain skills essential to successful use and understanding of the subject-content under the supervision of the teacher. Teacher gets the opportunity of observing the pupils from a close quarter and thus pupils are benefitted from individual attention by the teacher.

iv) Teacher's Guidance : When the students meet a difficulty they ask the teacher for direction and help. The teacher is always ready to aid and guide them.

Assumption behind Supervised Study :

The assumption behind supervised study is that there are individual differences among students and each student has a right to proceed and go ahead according to his ability:

Need for Supervised Study:

i) Individual Differences : Generally the teacher teaches from the point of view of average students. Supervised study is needed from the point of view of individual differences among the students. Some students learn slowly and some learn quickly. As the teacher teaches keeping in mind the average students, the bright and the slow learners are ignored. Supervised study is required for helping the students of different abilities and capacities. As the teacher watches and supervises he notes the difficulties faced by the students and directs and guides them according to their abilities.

ii) Revision of Class-Work : Supervised study is needed because it provides opportunities to the students to revise and review the work done in the classroom.

iii) Removal of Difficulties: The social studies teacher while observing 'the students

during the supervised study period can help the students to overcome their difficulties which may face in comprehending the prescribed textbook or reference book due to the above average difficulty level of the textbook or the poor reading ability of the students or the poor note taking ability of the students. The teacher can suggest corrective or remedial measures.

- Completion of Home Work: Almost all the teachers assign some home work to all the students. Many students do not get ample time at-home to complete their home-work due to one reason or the other. Teachers can help the students to complete or at least guide them to complete the home work.
- Availability of Effective Supervision: During the supervised study period, efficient supervision and guidance is available to the students in the form of capable teachers. It is an admitted fact that most parents cannot provide effective control, supervision and guidance to the children at home due to obvious reasons.

Methods of Organizing Supervised Study :

Important methods of organizing supervised study are as under:

- Individual Guidance Plan: Individual guidance plan is primarily meant for backward, slow learners or weak students who need special individual attention and guidance to make up their deficiencies. In this plan the teacher has to give some extra time after the school hours to help the backward, slow learner or weak students who need individual motivation and guidance to come up to the level of average students. It is indeed a good-plan to help the slow learners or weak students.
- Special Teacher Plan: Under this plan, as the name suggests, a special teacher is engaged to supervise and guide the students during supervised study in and after school hours and also specially help the weak students. He is not required to take regular classes but he can supervise different classes in different periods. He must be properly trained.
- Divided Plan : In the divided plan two social studies teachers supervise the tasks of the pupils in the duration. In this plan a class is divided into two groups. Each group is left under the charge of one teacher, either in the same room or in separate rooms. Both the teachers can adopt their own method of dealing with the weak students. One may adopt socialized recitation while the other may take up discussion. This should be followed by written work by the students. The period can also be

divided into two parts - the first part assigned to regular teaching work and the second be given to supervised study.

- Double Period Plan: In double period plan two periods are allotted to the pupils in a row. In the first period, pupils are instructed to study after presenting the background of the decided subject. In the second period, pupils study the subject and the teacher supervises their activities. It is almost similar to the divided period plan except that this plan givesmore time to the teacher and the students to complete their work. But this plan requires extension in school time which teachers may not like.
- Periodical Plan: In this plan, pupils are instructed to do predetermined tasks. After some definite period their progress is supervised. Hence the teacher performs the function of supervision and guidance weekly, fortnightly or monthly.

Various plans may be tried by the teacher and he should adopt whichever suits the best.

Steps for Conducting Supervised Study:

1. List of Objectives: This is the foremost step to be attained by supervised study with respect to a particular problem in the social studies
2. Adequate Planning: Then adequate planning is to be done, time schedule isprepared and the students are forced to stick to the same. A definite place isprovided to each student who understands his assignment before giving it astart.
3. Teacher's Help: The social studies teacher then helps the students to be active and interested in what they are studying with a purpose. The students now follow techniques to suit the subject and the objectives of a particular supervised study. The supervised study may also be spaced by providing breaks and rests. Supervised study can be highly fruitful if the students are also trained to evaluate their own work and habits of study.
4. Use of Maximum Skills: Maximum skills out of the following are applied by a student who is actively engaged in proper supervised study. (i) To read forinformation, (ii) To use library with purpose, (iii) To evaluate materials, (iv) To analyze the problem, (v) To plan for study, (vi) To take notes, (vii) To concentrate, (viii) To outline, (ix) To review, (x) To analyze, (xi) To build an adequate vocabulary.

The students must be provided practice and training in these skills before actual supervised study activities are engaged.

Importance, Advantages, Features or Merits of Supervised Study:

1. Individual Attention: Supervised study meets individual differences. It is an aid in helping to solve the problem of individual differences. The pupil works along his own mental level and at his own capacity. Assignments can be given to meet all levels of ability. As the teacher supervises each pupil, the pupil who proceeds slowly can be guided into effective learning experience meaningful for him. The discontented pupil can be given a more satisfying interpretation as he is guided by teacher's questions or suggestions to overcome difficulties. The pupil who works more rapidly and requires a greater challenge to use his ability can be further motivated to put in his best.

2. Minimizing Failures: Supervised study aids in preventing or at least minimizing failures. In supervised study slow learners or weak students get an opportunity to remove their difficulties and catch up with the average thereby gaining confidence and reducing the incidence of failures.

3. Better Pupil-Teacher Relations: Another good feature of supervised study is that it promotes better pupil-teacher relations. The teacher appears in the role of helper and guide. There is greater opportunity for the display of sympathy and understanding than the usual class teaching procedure. The teacher is able to understand the pupil and his difficulties better and in a position to spurt him on to a greater effort.

4. Development of Democratic Qualities: Supervised study develops democratic qualities like habit of co-operation, tolerance, sympathy and independent judgment. Pupils learn to share materials, to wait their turn and to understand their own difficulties. This develops a sympathetic attitude towards the difficulties of others. Thus supervised study also encourages democratic human relations.

5. Development of Intellectual Abilities: Supervised study experience can be influential in establishing habits ofcritical thinking, critical analysis and discriminationin evaluating ideas and an objective investigation of facts on the part of students. It encourages the student to compare facts and to evaluate the sources of facts. He learns to withhold his opinion until enough evidence is available to justify a conclusion. Thus, students learn to examine the material critically. This, in itself, is a valuableexperience.

6. Development of Skills: Certain skills can be developed with the help of supervised study method. Athorough use of the supervised study method would reveal weaknesses in the

learner. Following skills can be developed easily with the help of this method:

(i) Skill of reading social studies material.

(ii) Skill of using dictionaries.

(iii) Skill of using encyclopedias.

(iv) Skill of reading graphs.

(v) Skill of using maps atlases and indexes etc.

7. At the Spot Guidance: The teacher can detect a pupil's habits of study, efficiency of study skills and degree of progress. At the spot guidance can be given. This can be very useful. Pupil's time is saved as the errors are corrected at once. This enables the teacher to redirect his efforts.

Limitations of Supervised Study (Objections to Supervised Study):

1. Costly: Supervised study is a costly method. It would necessitate an increase in the teaching force that would mean an increased cost of education.

2. Lengthened School Day: Supervised study requires the lengthened school day by one or two periods which is not possible, maybe due to pressure of co- curricular activities.

3. Not Helpful for Bright Students: Some investigations have shown that supervised study is definitely useful for weak students, but it may not be so useful for bright students as the teacher pays more attention to the weak and slow learners. However it all depends upon the teacher how to make use of this device in assigning work to the students according to their abilities and capacities.

4. Discourages Self-Dependence: Supervised study makes the pupils more and more dependent upon the teacher and discourages working on their own. At every stage they would like to seek teacher's help which discourages self-relianceand self-dependence.

5. Discourages Home-Work: Some educationists believe that supervised study discourages home-work. Students try to complete the home-work during the supervised study period and do nothing at home. But a skilful teacher will balance the work to be done during the supervised study period and at home.

6. Requires Initiative and Enthusiasm: Supervised study depends too much on the initiative and enthusiasm of the students which they seldom display.

7. Secondary Role of the Teacher: In supervised study the teacher plays a secondary role

in the teaching-learning process. Therefore, according to some educationists supervised study destroys the supremacy of the teacher.

Precautions while using Supervised Study Method:

Following precautions should be observed to make the supervised study technique a success:

1. Resourcefulness: To make this technique a success, a teacher must possess insight and resourcefulness.

2. Scientific attitude: While using this method, the teacher should plan in such a way that a scientific attitude may be developed.

3. Friendly habit: A habit of working in a friendly way should be developed with the help of this method.

4. Self-dependence and self-confidence: Self-dependence and self-confidence should be developed by using this method.

5. Assigning task: The tasks assigned to the pupils should be according to their interests and physical and mental abilities.

Inspite of certain limitations judicious and effective use of supervised study is very useful as it aids in helping to solve the problem of individual differences, of the weak, the average and the bright, helps in minimizing failures, helps in maintaining better pupil-teacher relations and developing various study skills. For making this method successful the teacher must possess insight and resourcefulness. The tasks should be assigned to the pupils while keeping in mind their interests and abilities. Scientific attitude, friendly habit of doing work, self-dependence and self-confidence should be developed by using this method.

(5) Dramatization (Dramatics)

Dramatization (Dramatics) has a universal appeal to old and young alike. The child by nature has a dramatic tendency has to appreciable extent. He is a born actor. Right from his childhood he starts imitating his elders. He plays the role of father, mother shopkeeper, soldier, teacher, doctor and juggler. The school should utilize the dramatic tendency of the child.

Meaning of Dramatization:

Dramatization is a synthetic art which involves the purposive coordination of speech and muscles of the body combined with a sense of rhythm and music, ideas and emotions, diction and

movements.

Importance/Purposes/Need or Value of Dramatization:

1. Emotional and Psychological Importance (Value): Dramatization provides opportunities for the catharsis of emotions through expression of innate urges. It releases pent up energies and emotions and has a curative effect on emotional disorders. The release of inhibitions through role play is the objective of a socio-drama. The pupil plays different roles and satisfies his innate tendency to play, to imitate, to express himself and to enjoy.

2. Linguistic Importance (Value): From the linguistic point of view, dramatization improves his speech, expression and use of vocabulary. He learns better pronunciation, intonation, tone, accent, pause, rhythm and other qualities of elocution.

3. Academic Importance: Incidentally, the dramatization provides knowledge of various subjects like history, geography, art, music and of various items of dramaturgy like staging, lighting, costuming, decorating etc. in an effective and attractive manner. Even those pupils who do not play any role but act as spectators are benefitted by the school drama through the acquisition of certain new facts, through entertainment and suggestions presented in the play.

4. Social Importance: Dramatization has a great social value. It is a co-operative enterprise and develops qualities of co-operation and social understanding. It provides many opportunities for training in team work. It helps in fostering 'esprit de corps' among the pupils. Students learn the skills necessary for effective group action.

5. Intellectual Importance: Dramatization is valuable in that sense that at its best it can train the imagination and develop initiative, originality and ingenuity.

6. Recreational Importance: Dramatization has recreational value. It provides a rich and healthy entertainment.

7. Creative Importance: Dramatization develops creativeness in teaching of social studies, especially when episodes of history are involved. In dramatics children engage themselves in creative make-believe acting. They learn what no teacher can teach. It provides to students, participating as actors with a system of communication that is based on action and word symbols. Thus knowledge is developed while playing.

8. Aesthetic Importance: Dramatization develops aesthetic sense and appreciation in both the student-actors and the observers.

9. Motivational Value: Introducing a topic through dramatization has a motivational value for the students. The students become motivated.

10. Organizational Value: The staging of a dramatic performance provides a rich experience in organization. Organizational ability of the student is developed.

11. Awareness Value: Through dramatization awareness can be created among the students about domestic, economic, social, institutional and other problems. Social, religious and national events can be dramatized to leave a permanent impression on the minds of the students.

12. Stage Value: The participants get rid of stage fear and develop stage confidence.

13. Community Value: Parents of the students, other local dignitaries and members of the community develop interest and attraction for the school.

In the words of Dr. Jaswant Singh, dramatization is probably "The most educative and the most satisfying activity of the entire co-curricular programme. It provides a healthy outlet to adolescent urges and needs of the pupils. And if properly planned and integrated with the academic programme of the school, it can become a very effective vehicle of instruction. It has a universal appeal and has immense educational possibilities."

Forms of Dramatization (Dramatics):

1. Full-Length Play: Students may enact a full-length play e.g., Alauddin Khilji and Rani Padmini. But it is a costly affair to stage a full-length play.

2. One-Act Play: In one-act play there is a brief plot covered by one act. It is convenient and economical to stage a one-act play. For example, dialogues between Alexander and Porus.

3. Puppet-Play: A puppet-play represents an ancient art. For example Aurangzeb killing all his brothers and imprisoning his father.

4. Dance-Play: A dance-play depicts the whole theme through dance and music alone.

5. Shadow-Play: In shadow-play, the actual players remain behind the screen and only their shadows are visible on the screen.

6. Radio-Play: It is the modern form. No stage is required in radio-play.

7. Pageant: Pageant is a play with successive scenes without any dramatic plot e.g., a pageant of Indian art, a pageant of Indian dress, a pageant of Indian dance, a pageant of Indian culture, a pageant of Indian occupations.

8. Histrionics: Histrionics is a play in which a person acts as a number of differentroles. It is a one-act play. For example, the same person assuming the role of Shah Jahan, his daughter Jahan Ara and the English Trader Sir Thomas Rao.

9. Monologue: In monologue there is only one actor.

10. Pantomine: In pantomine everything is expressed through action without speech. For example Umar Khayam reflecting on the starring universe a poor peasant mourning on the failure of monsoons etc.

11. Tableux: Tab is a type of variety show. It is a mingling of action, music and dance accompanied by a running commentary. For example a tableux on Gautma's life, how he thought of renouncing the world, how he preached and how his devotees flocked to him.

Limitations of Dramatization:

1. Time Consuming: Dramatization is time consuming and energy consuming. It requires a lot of labour.

2. Costly: Dramatization is a costly activity.

3. Inefficient Teacher: The teacher may not be resourceful enough to selectthe right kind of material for dramatization. Problem of writing dialogues is faced by many teachers. Dialogue writing is a forceful technique and it is the job of a selected few. Most of the teachers are not open-minded enough to try new ways of working together. Special teachers are required which are generally notavailable.

4. Twisted Theme: The subject-matter and the central idea of dramatization may be changed and twisted to make it more dramatic.

5. Confined to a Few Students: The same students may be chosen time andagain to play the roles. There should be widest possible participation.

Organization of Dramatization or Dramatics (Precautions):

1. Selection of students: Students who have interest and aptitude should be enrolled as members of the dramatic club.

2. Selection of teacher-in-charge: The teacher-in-charge should be really capable person who is having interest, aptitude and ability for dramatics. It is better if dramas are organized under the careful direction of a specialist teacher.

3. Selection of Play: Selection of play must be made in a judicious manner by a committee of experts. Fables and folk-tales must suit even the Primary school pupils. Social plays, plays with historical, geographical or national themes must be preferred at the secondary stage. The plays should have literary, educative and moral value sides the entertainment value. They may depict the evils of social customs. They may depict the visit of social customs. The students should be able to understand and appreciate the play. Hence the play must suit the mental level of the pupils. Vulgarity, obscenity, crime communalism and indiscipline should be avoided on the stage, as these have bad effect on the minds of the pupils. The dialogue, dresses and actions should be as realistic as possible.

4. Preparation of the Play: The next step is the preparation of the play. The preparation must be thorough and perfect. A number of rehearsals must be made before final presentation on the stage. The items of preparation are :

(i) Allotting different roles to different actors;

(ii) Listening to their memorized conversation;

(iii) Correcting the pronunciation, tone and accent;

(iv) Training the pupils in musical performance;

(v) Stage-setting and decoration ;

(vi) Publicity

(vii) Seating arrangement and

(viii) Lighting.

5. Students' Contribution: The students must be encouraged to take part in dramatics notices at some or the other occasion. They may write own plays, allot roles among themselves and prepare as much as they can do themselves. The distribution of roles should be done according to interest and abilities of students. The same pupil should not take the same role every time. The pupils should be encouraged by awarding prizes, shields and certificates, Excessive emphasis should not be laid on pomp and show

Examples of Events for Class Dramatization:

1. Ashoka's Propagation of the Dharma.

2. Spread of Buddhism.
3. Golden Age of the Guptas.
4. A Scene in the Court of Chandra Gupta and Vikramaditya.
5. Sher Shah Suri's Administrative System.
6. A Dialogue Between Alexander and Porus.
7. Bahadur Shah Zafar in Prison.
8. A Leaf from Kautilya's Life.
9. Aurangzeb's Killing His Brothers and Imprisoning His Father.
10. Shivaji's Escape From Agra.
11. Round Table Conference.
12. Tenzing Climbing Everest.
13. Rana Partap after the Battle of Haldighat.
14. Journey of Exploration and Discovery.
15. Mock Parliament.
16. Mock Elections.
17. Dramatized Renderings of the Work Done by Municipalities and International Agencies.

List of Events for Full-length Plays:

1. Shivaji and Aurangzeb.
2. Prithvi Raj and Sanyogita.
3. Chandragupta and Chanakya.
4. Buddha and His Teachings.
5. Guru Nanak and His Teachings.
6. Jesus Christ and His Teachings.
7. Harish Chandra.
8. Importance of Weather and Sea to a Fishing Village.

Check Your Progress- 2

Note : a) Answer the questions given below.

b) Compare your answers with those given at the end of the lesson

Multiple Choice Questions

1. Co-curricular activities helps the students to sharpen their

   a) Communication skills b) Expression skills

   c) Participation d) All the above.

2. Dramatics provides direct opportunity of improving

   a) Speech,expression,pronunciation b)Behavior

   C) Religion d) Nationality.

3. Excursions provides firsthand knowledge about

   a) Teaching contents and objects b)Institutions

   c) Entertainment d) None of the above.

4. _ is an important technique for teaching of history.

   a) Excursion b) Supervised study

   c) Dramatization d) Debate.

5. One of the drawback of dramatization is that it is

   a)Time consuming b) unexciting

   c) Lengthy d) Not appealing.

7.7 LET US SUM UP

To conclude, co-curricular activities are very significant and possess tremendous educational value. No system of education is complete in their absence. They are conducive to

healthy development of pupil's personality. They have physical, psychological, moral, spiritual, civic, social, cultural, aesthetic, disciplinary, andrecreational and leadership value. It is said that without co-curricular activities, "the schools are reduced to teaching shops, the teachers become information mongers, the pupils become book-worms, and education narrows down to mere cramming.

7.8 LESSON END EXERCISE

Short Answer Type Questions

1. Define meaning of co-curricular activities.
2. Give characteristics of educational excursion.
3. What is the importance of museum?
4. What do you understand by supervised study.
5. What are the forms of dramatization?

Long Answer Type Questions

1. Give the meaning of co-curricular activities. Discuss their need and importance in the teaching of social studies.
2. Discuss the importance and steps for organizing co-curricular activities forteaching of social studies.
3. Discuss the importance and value of excursions and field trips in the teaching of social studies.
4. What do you mean by supervised study? Discuss its need and procedure inthe teaching of social studies.
5. Discuss the merits and demerits of supervised study.
6.

7.9 SUGGESTED FURTHER READINGS

Sharma, P. S. (2011). Teaching of Social Science (Principles, Approachesand Practices. New Delhi: Kanishka Publishers & Distributors.

kanishka_publishing@yahoo.co.in

Ruhela, S.P. (2019). Teaching of Social Science. New Delhi: Neelkamal Publication Pvt. Ltd. www.neelkamalbooks@gmail.com

7.10 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress- 1. 1 Latin, 2. Learning, 3. Stress, 4. School programme, 5. Literary.

Check Your Progress-2.1 (d), 2. (a), 3. (a), 4. (b), 5. (a).

****

LESSON NO. 8 UNIT–III

MEANING AND IMPORTANCE OF A LESSON PLAN

8.1 STRUCTURE

8.1 Introduction

8.2 Objectives

8.3 Concept of Lesson Plan

8.3.1 Definitions

8.3.2 Pre-Requisites for Effective Lesson Planning

8.3.3 Importance of Lesson Plan

8.3.4 Characteristics of Good Lesson Plan

8.4 Unit Plan

8.4.1 Planning of a Unit

8.5 Year Planning

8.5.1 Importance of Year Planning

8.6 Let Us Sum Up

8.7 Lesson End Exercise

8.8 Suggested Further Readings

8.9 Answers to Check Your Progress

8.2 INTRODUCTION

The instructional process is of vital importance because it is through the process of instruction that many social studies objectives are achieved. The question of "what" to teach always precedes

"how" to teach it. A good instructional process is one that enables the teacher and pupils to achieve predetermined objectives by selecting appropriate teaching-learning strategies. In this unit a careful discussion on lesson plan and unit plan is presented. When you decide what the instructional objectives are, the sequence, of learning activities and how those activities are to be introduced, experienced and integrated, you make your own teaching sequences. Alesson plan or a unit plan kill emerge depending upon the magnitude of your effort. Lesson plans or unit plans based on materials other than those found in textbooks (instructional inputs) often reflect a high order of creativity.

8.3 OBJECTIVES

After giving through this lesson, you shall be able to:

- define lesson plan,
- explain salient features and importance of lesson plan,
- plan a unit plan from the prescribed syllabus, and
- discuss the importance of year planning.

8.4 CONCEPT OF LESSON PLAN

Teaching is a purposeful activity. It has been repeatedly emphasized that good and effective teaching stimulates the learner to think and motivates them to learn further. The teacher is to create learning situations and organize them in such a way that thechild feels the inner urge to know, to think and to do. It is not as simple as it seems. But just as in all other spheres of human activity, planning makes even difficult task easier. Therefore, for successful and effective teaching, planning is the first and most important step

Alesson plan is the systematic preparation done in a scientific manner. Effective and successful teaching mainly depends on perfect lesson planning. Generally, a lesson plan is teachers' mental and emotional visualization of classroom activities.

A lesson plan is a teacher's detailed description of the course of instruction or 'learning trajectory' for a lesson. A daily lesson plan is developed by a teacher to guide class learning. Details may vary depending on the preference of the teacher, subject being covered, and the

needs of the students. There may be requirements mandated by the school system regarding the plan. A lesson plan is the teacher's guide for running the particular lesson, and it includes the goal(what the students are supposed to learn), how the goal will be reached(the method, procedure) and a way of measuring how well the goal was reached (test, worksheets, homework etc.)

8.4.1 Definitions

There are three phases of teaching, namely; pre-active, interactive and post active. Before entering in the classroom whatever activities are planned and recorded may be put as pre-active phases of teaching. In other words, the lesson planning isthe pre-active phase of teaching.

W.M. Ryburn considers that pupil teacher gains experience about his classroom work through lesson planning, so that he is able to perform his tasks successfully in his teaching. He has defined this concept precisely in these words. "To teach we must use experience already gained as starting point of our work".

In the words of Lester B. Stands, "A lesson plan is actually a plan of action. It therefore, include the working philosophy of the teacher, his knowledge of philosophy, his information about and understanding of pupils, his comprehension of the objectives of education, his knowledge of the material to be taught and his ability to utilize effective methods."

Bining and Bining have explained the structure and purpose of lesson plan in their definition. According to them, "Lesson planning involves defining the objectives, Selecting and arranging the subject-matter and determining the method and procedure."

N.L. Bossing has given a comprehensive definition of lesson plan in these words "Lesson plan is the title given to a statement of the achievements to be realized and the specific meaning by which these are to be attained as a result of the activities engaged during the period."

I .K. Davies has given four steps for management of learning viz. planning, organizing, leading and controlling So, he has given the greater importance to lesson planning as the first step of teaching. According to Stands, a lesson plan is "Aplan of action".

8.4.2 Pre-Requisites for Effective Lesson Planning:

The effective lesson planning requires some pre-requisites. A teacher should be equipped with certain abilities to fulfil these pre-requisites. The followings areimportant pre-requisites or elements of lesson planning.

- The first and foremost pre-requisite is the thorough knowledge of subject- Matter.

Therefore, the teacher should have mastery on the content to be taught, identifying learning objectives in taxonomic categories.

- The teacher should know his pupils and their need. He should have the awareness of individual differences of pupils and should make the provision in lesson plan to adjust the individual differences of the group.
- The selection of appropriate teaching strategies, tactics and teaching aids in view of content and objectives to be achieved is an important step.
- The teacher should have ability to select and make use of required procedures and support device.
- The teacher must have the competencyin relating teaching activities to learning structures by using appropriate teaching and communicating strategies.
- The teacher should be competent in planning and organizing the teaching activities. He should also be able in reinforcing the pupils' activities and monitoring their behavior.
- He should have the skill for the effective use of black board visuals in presenting the content.
- A teacher should have good knowledge and skill of developing working questions, explanations for the lesson plan.
- The teacher should be able to construct criterion test for evaluating the learning outcomes of pupils.

8.4.3 Importance of Lesson Plan

Planning is essential for every aspect of human activities, but for aplanned teaching more planning is required.

1. Suitable Environment: In a lesson plan objectives are fixed and the teaching strategies, techniques and material aid etc. are decided beforehand. When a proper teaching environment is created, the teaching task goes in a much planned way.
2. Based on Previous Knowledge: In preparing lesson plans, the teacherpresents new knowledge as the basis of previous knowledge of the pupils. This enables the pupils to gain the knowledge very conveniently on one side; the teacher succeeds in acquiring his objective on the other side.
3. Psychological Teaching: The teacher uses proper teaching strategies, techniques

and instruments keeping in mind the interests, aptitudes, needs,capacities and abilities of the pupils for teaching them when the lesson plans are prepared. This makes the teaching more psychological.

4. Limitation of Subject Matter: In a lesson plan, the subject matter becomes limited. This enables the teacher to give up irrelevant things. He onlyremembers definite and limited matter and its presentation before the pupils become easy. The pupils also receive the knowledge in a systematic and organized way.
5. Determination of Activities: In a lesson plan, the teachers and pupils activities are pre-decided according to the class level. This makes the teaching activities meaningful and purposeful.
6. Preparation of Material Aids: At the time of preparing a lesson plan, the teacher decides what facts are to be clarified by what strategies, techniquesand instruments and what aid is to be used at what time. This prepares the necessary and effective aids before starting the teaching task.
7. Development of Teaching Skill: The lesson plan acts as an important means for developing teaching skills in the pupil-teacher.
8. Use of Theoretical Knowledge: Whatever the pupil-teacher get theoretical knowledge during their training period, that knowledge is effectively used.
9. Teaching with Confidence: The preparation of lesson plan makes the subject and other allied subjects more clearly to the teachers. This arouses self confidence among them. When a teacher gets developed the feeling of self confidence, then he presents the new knowledge to the pupils with more enthusiasm and pleasure.
10. Discipline in Class: By preparing lesson plan, the teacher becomes aware of what, when and how much is to be done in the class. This absorbs all the pupils in their respective tasks. Hence, it results in appreciable classroom discipline.
11. Time Sense: Lesson plan is prepared allotting to the duration of the periods.
12. Teaching from Memory Level to Reflective Level: In an ideal lesson plan, development and thought provoking questions should be asked. And there should be an effort to stretch the teaching from memorylevel to reflective level.

8.4.4 Characteristics of Good Lesson Plan

1. Objective Based: The lesson plan must be based on one or the other objective.

While writing this, objectives should be written and defined clearly because its main objective is to achieve some goal.

2. Decision about Appropriate Material Aids: The material aid is an important means of the teacher. Hence, correct decision regarding the charts, graphs, pictures, diagrams and maps should be taken while preparing ideal lesson plan and these should be marked at proper places which a teacher is to use them while teaching.
3. Based on Previous Knowledge: An ideal lesson plan should be based on the previous knowledge of the pupils. This will avoid difficulty in acquiring new knowledge by the pupils.
4. Division of Lesson Plan in Units: Lessons are of three types (a) knowledge lesson (b) skill lesson (c) appreciation lesson. In an ideal lesson plan all the relevant steps of these three types of lesson plan should be determined. Each lesson should be divided into suitable units so that the pupils may understand the lesson gradually.
5. Simplicity of Activities: In an ideal lesson plan, the simplicity of the lesson plan and clarity of thoughts should be according to the mental level of the pupils.
6. Determination of Activities: In an ideal lesson plan, the activities of a teacher and the pupils should be determined before- hand.
7. Home- Work: There should a provision of home work in an ideal lesson plan. This will enable the pupils to learn the appreciation of the acquired knowledge.
8. Self- Evaluation: A good lesson plan must have a suitable plan for self-criticism. The teacher should put some questions to him and find out the answer and thereby judge the effectiveness of the lesson writing.
9. Use of Illustration: Examples should be used which have relevance with the daily life of the people.
10. Use of Blackboard: The blackboard summary of each and every unit shouldbe written on the blackboard.

Check Your Progress-I

Note : (a) Answer the questions given below

(b) Compare your answers with those given at the end of the lesson

1. A lesson plan is the systematic preparation done in a _ __ _ __ ___ manner.
2. _____ considers that pupil teacher gains experience about his classroom work through lesson planning.
3. According to _____ "A lesson plan is actually a plan of action."
4. For successful and effective teaching _____ is the first and most important step.
5. A good lesson plan must have a suitable plan for __ _ __ _ __ _

8.5 UNIT PLAN

A unit is a large subdivision of the subject matter. A teacher prepares the unit plan after preparing the year plan. A unit plan may extend to more than one period. It may take 4 to 8 period depending upon the subject matter of the unit.

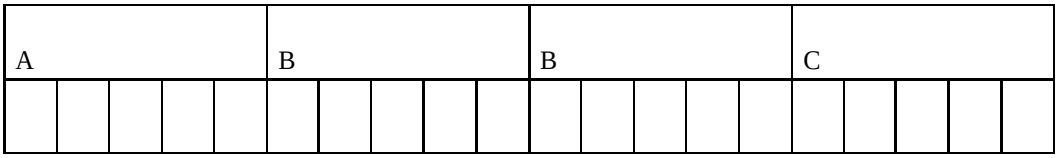
8.5.1 Planning of a Unit

The main advantage of a unit plan is that it facilitates the management of learning. As the sequence of learning activities, and the related learning materials to be used, is listed in the unit, it even simplifies lesson planning. When planning is topical (lesson), the children may not have a sense of accomplishment in terms of true learning as the same cannot be tested. But at the end of an instructional unit in the teaching of social science, children can sense accomplishment. For that purpose, we need to focus our efforts on planning (and managing) instruction keeping in view that our unit objective will be stated in specific monitorable and documented form. As we try to monitor the instruction, we can communicate to the children our concern for their learning and make necessary correction for successful learning. As we document learning, we can communicate to children that they have learned.

A unit plan is similar to a lesson plan in many ways. Objectives give direction to its organization and sequence. A unit plan has five sections, namely, introduction, objectives, contents, hints for teachers and evaluation

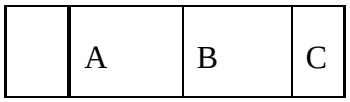
A unit plan is also different from a lesson plan because it is more extensive. Its objectives have a wider scope. The following diagram gives a structural comparison of the lesson plan, the

unit and mini units or sub-units. Mini –units are sub divisions of a unit consisting of several lessons.



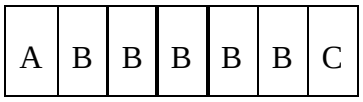
Lesson plan

- ……



Mini Unit

- ……..



1. Objectives A=Opener
   B=Development (Content-concepts/valuesetc.) C=Closer
   Thus, lesson plan and unit panning help us systematization of learning social science.

Unit planning stands for the planning of the instructional work of the session bydividing prescribed syllabus into some well defined and meaningful units.

2. It helps in the proper coverage of syllabus.
3. It proves advantages since it organizes the subject matter and learning experience.
4. It lays proper stress in the formula of teaching learning objectives of the unit in behavioral terms.
5. The teacher is well informed of the methods and strategies used.
6. Unit planning helps in the proper organization of teaching learning process.
7. Unit plan has a proper provision for the review, relational practice and drillrelated to the content.

Check Your Progress-2

Note : (a) Answer the questions given below

(b) Compare your answers with those given at the end of the lesson

True/False

1. The main advantage of a unit plan is that it facilitates the management of learning. (True/False)
2. Unit planning helps us systimatization of learning social science. (True/False)
3. Year planning is a short term planning. (True/False)
4. Year planning makes evaluation on objective based. (True/False)
5. Unit planning does not helps in proper coverage of syllabus. (True/False)

8.5 YEAR PLANNING

Year planning is a long term planning of the instructional process. Teachers are provided with prescribed curricula to be transacted. At the beginning of the academic year, all teachers make a plan for organizing the year's work. Such a planning would provide the teachers with a design of the work to be executed during the year as a whole. In this design the total course materials is divided into units and units into daily lessons. Year plan in a social science should indicate the course purpose and objectives, course units, numbers of lessons, the time scheduled for dealing with each unit, general suggestions regarding methods of teaching, details of equipments and aids, their sources etc.

8.5.1 Importance of Year planning

- It indicated the total weight to be given for various instructional objectives and learning material.
- It point out the broad based strategies for achieving these objectives and the methods and approaches to be adopted for each topic.
- It gives suggestion to make teaching interesting economic and effective.
- It makes evaluation easier as teachers are clear about the weightage given toobjectives as well as content.
- It makes evaluation objective based.
- It promotes professional co- operation and mutual exchange of ideas as the teachers of a

school plan for the year jointly.

8.6 LET US SUM UP

Lesson plan is a written description of education process in which it is shown what, when, where and with which method learners should learn and how they should be assessed. Lesson plan is one of the key factors in the educational process.Lesson plan is important in increasing the quality of education.Lesson planning is very essential as it helps the teacher conduct his/her lesson in an orderly fashion and it allows students to know what they are going to be learning and how it fits into the course syllabus. It will help teacher to plan his lesson in orderly manner.

8.7 LESSON END EXERCISE

1. Define Lesson Plan.
2. Discuss the concept of lesson plan.
3. Enlist characteristics of a good lesson plan.
4. Explain planning of unit in social science with example.
5. Explain year planning along with its importance.

8.8 SUGGESTED FURTHER READINGS

Houston, D., & Beech, M. (2002). Designing lessons for the diverse classroom a Handbook for teachers.Florida: Department of Education.

Kameshwari, A. H., & Krishnaiah, R. (2017). Pedagogy of Social Science.New Delhi: Bookman Publishers.

Killen, R. (2010). Teaching strategies for quality teaching and learning. Cape Town: Juta.

8.9 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress- 1. 1 Scientific, 2. W.M.Ryburn, 3. Dester B, 4. Planning,

5. Self Criticism.

Check Your Progress-2.1 True, 2. True, 3. False, 4. True, 5. False.

******

Lesson No. 9 Unit–III

STEPS FOR PREPARING LESSON PLANS THROUGH HERBARTIAN AND RCEM APPROACH

9.0 STRUCTURE

9.1 Introduction

9.2 Objectives

9.3 Herbartian Approach

9.4 RCEM Approach

9.5 Let Us Sum Up

9.6 Lesson End Exercise

9.7 Suggested Further Readings

9.8 Answers to Check Your Progress

9.1. INTRODUCTION

All of us are aware of the importance of planning in our life. All kinds of activities requireplanning. Planning for anypurposeful activityshows results. In addition, planning leads to shared understanding and acceptance of clear and attainable goals. In teaching-learning process planning of instructional activities enhances students' performance. Planning can give both teachers and students a sense of direction.

9.2 OBJECTIVES

After going through this lesson, you shall be able to:

- describe various steps involved in Herbartian approach, and
- explain RCEM approach of lesson planning.

9.3 HERBARTIAN APPROACH

This approach generally known as Herbartian steps approach in the procedure of the

Herbartian school was propagated by J.F. Herbart (1776-1841) and hisfollowers.

Following are the steps involved in Herbartian approad

i. Introduction

ii. Presentation

iii. Comparison and association

iv. Generalization

v. Application

vi. Recapitulation

i. Introduction

This step is concerned with the task of preparing the students for receiving new knowledge. In preparation, nothing new is taught to students. Relevant to the topic in hand the teacher should make himself sure of what the pupils already know, by putting a few questions, based on the pupils previous knowledge. In general, with the help of this step, the teacher can check the students entering behavior before hestarts teaching the lesson. Thus, testing previous knowledge, developing interest inthe minds of students and maintaining curiosity of the students can be achieved with the help of this step.

The following activities are involved in this step:

- The assumption about the previous knowledge of the students in relevance to the lesson
- The testing of the previous knowledge
- Utilizing the previous knowledge for introducing the lesson
- Motivating the students for studying the present lesson

ii. Presentation

It is the key step and only through which the actual process of teaching is going to take place. Here the aims of the lesson should be started clearly and the heading should be written on the blackboard. We have to provide situation for boththe teacher and the students to participate in the process of teaching and learning. Our ultimate aim of the presentation is to make the concepts understandable to the students. Therefore, simple language is used. Appropriate and specific examples and illustrations of the concepts will make the understanding

better. The interest of the students on the subject matter should be maintained continuously by the way of asking questions from time to time in this stage. The teacher should carefully and skillfully arrange his material so that his pupils may clearly and readily grasp it. The teacher should make proper use of questions, charts, graphs, pictures, models and other illustrative for demonstration and explanation.

At the end of each section a few questions concerning that section only should be asked to whether the pupils are now ready for the acquisition of new knowledge.

iii. Comparison and Association

More important should be given in this stage to compare the facts observed by the students with another concept by way of giving examples. By making use of this comparison, the students can derive definitions or theories. The students are encouraged to give new suitable examples for the concept instead of the examples given in the book to make them think in an innovative manner.

iv. Generalization

This step is concerned with arriving at some general ideas or drawing out the necessary conclusions by the students on the basis of the different comparison, contracts and associated observed in the learning material present by the teacher. As far as possible the task of formulation should be left to students. The teacher at this stage should try to remain in the background for providing only necessary guidance and correction.

v. Application

In this stage, the teacher makes the students to use the understood knowledge in an unfamiliar situation. Unless the knowledge of science is applied in new situation or in our day-to-day life, the study of science will become meaningless. This application of scientific principles will strengthen learning and will make the learning permanent.

vi. ecapitulation

This stage is meant for the teachers to know whether students have grasped by reviewing a lesson or by giving assignments to the students. Only through this step achieving closure (in teaching) is possible.

HERBARTIAN LESSON PLAN MODEL

Date…….. Class……

Period……

Subject……

Topic……..

1. General Objectives

These objectives are formulated by the teacher in his subject keeping in view the entering behaviors of the learners.

2. Specific Objective

These objectives are formulated on the basis of general objectives and considering the nature of the topic and level of students. These are specified in terms of knowledge, skill or appreciation. These objectives are written in behavioural terms.

3. Introduction.

Here, the teacher employs his insight and experiences for linking new knowledge with the previous knowledge of the students. The topic is not introduced directly but it is usually emitted by the students' responses by asking introductory questions.

4. Teaching Aids

Audio-visual aids are selected according to the proposed topic.

5. Previous knowledge

Students' previous knowledge is mentioned. .

6. Statement of Aim

The teacher gives his statement of teaching topic by incorporating the students' responses.

7. Presentation

The teacher prepares the developing questions after introducing the topic. The question are arranged in logical sequence, i.e., from simple to complex, considering the structure of the topic.

8. Explanation

The teacher is supposed to explain the answers of the given developing question, as whole of the content-matter is in the question-answer form.

9. Black board Summary

The teacher has to prepare the black-board summary of his teaching point and explanations.

10. Review Questions

The purpose of these questions is to practice the students' learning and to evaluate their performance whether they have comprehended the teaching unit or not. These review questions are asked only after rubbing the black-board summary.

11. Home assignments

At the end of the lesson plan, home assignment is given to the students on the same teaching unit. The purpose of home work is to practice, to organize and to study the topic for better understanding and retention.

- Advantages

1. Organized Teaching

Each step has been organized in a logical order which provides an opportunity to the fresh teacher to become aware of future mistakes. Originality is never affected and the teaching goes on in a very organized way.

2. Acquiring thoughts as apperception.

Herbart believed that when the new thought related to the thoughts lying in unconscious mind of the pupils are presented, the thoughts of unconscious mind come to the conscious mind, establish relationship with the new thought and again go to the unconscious mind. Herbart termed this material process of acquiring thoughts as apperception.

3. Use of Inductive and Deductive Methods

While presenting the new knowledge, help of various examples is sought through generalization and rules are derived. It is an inductive method. In the step application, these rules are to be executed, this is a deductive method. Thus, both indicative and deductive methods are used in this five steps approach.

4. Recapitulation

Such question is asked while recapitulating which, on answering, result in the learning and application of the acquired knowledge in new situations.

5. Correlation Possible

Herbart considered entire knowledge as a single unit. The knowledge of the pupils is acquired in a single unit. This allows in establishing a correlation between previous and new knowledge and between all subjects of the curriculum.

- Disadvantages

1. Mechanical Method of Teaching

The use of these steps takes away the freedom of the teacher as he cannot incorporate his independent thought in any step. This reduces his originality. Hence, Herbartian approach is a mechanical method of teaching.

2. No Place for Individual Differences

While using Herbartian approach. Similar questions are asked to the entire class. This overlooks individual differences.

3. Useful in Knowledge Lesson only

Herbartian approach is useful in the knowledge lesson only, not in appreciation and skill lessons.

4. Teacher More Active

In Herbartian approach, the teacher has to be more active. It is more desirable if the pupils remain more active than the teachers. As this teaching method is not activity-centered, pupils don't get any motivation for learning.

5. No need of Generalization

Generalization is not needed while teaching language, geography, history, music and arts etc. Thus, all the five steps are not needed while teaching.

6. Uninteresting

This approach stresses upon the teaching of all the subjects of curriculum in a similar sequence overlooking the interests, attitudes, abilities, and capacities of the pupils according to their mental development. The entire teaching becomes monotonous. The pupil does not show any interest in acquiring new knowledge. Thus, Herbart?s teaching method is not interesting

7. Difficulty of Correlation.

Considering the knowledge as a complete unit, Herbart emphasized correlation between

different subjects for the unity in the mental life of the pupils, but following these five steps teachers impart the knowledge of different subjects to the pupils differently. They seek to establish a correlation between various subjects in order to bring integration in the mental life of the pupils which is essentially difficult, if notimpossible. So, in nutshell it can be concluded that Herbartain Five-Step Approach, is an impressive and psychological teaching method. It includes both inductive and deductive methods. A correlation among all the subjects of the curriculum is possible by its use. There is a provision of recapitulation in the step under application.

However, some educationists point out that this method is useful only for knowledge lessons. Generalization is not needed in every lesson. Herbart's method is mechanical. There is no place for individual differences. It does not motivate the pupils to learn by doing. The correlation between the different subjects is essentially difficult. Glower points out that in Herbartianapproach, emphasis is laid on teaching only instead of learning. This reduces the freedom of the teacher. Pupils also become passive. Neither is their character formed nor do they reach their desired goals. However, the pupil-teachers should follow this approach with necessary changes keeping its merits in view.

Check Your Progress - 1

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. Herbartian approach was propagated by J.F. Herbart. (True/False)
2. The testing of previous knowledge is not part of Herbartian approach. (True/False)
3. Presentation is the key step through which the actual process of teaching is going to take place. (True/False)
4. Herbart Considered entire knowledge as a single unit. (True/False)
5. Recaptulation is one of the important part of Herbartian approach. (True/False)

9.4 RCEM APPROACH

The Indian educationists developed a new approach to lesson planning which is an improvement over the earlier approaches. This approach was developed in Regional College of Education Mysore. So, it is known as RCEM method of lesson planning. In this approach of lesson planning, the design plan consists of three aspects:

i Input

i Process

ii Output

Input— This aspect is concerned with the identification of objectives. Input may also be termed as 'expected behavioral outcomes' (EBOs). These objectives are broadly classified into four categories viz. knowledge, understanding, application and creativity. These objectives are written in behavioral by employing seventeen mental abilities. The entering behaviors of the students are also identified. The sequence of instructional procedure is determined with the help of these objectives.

Process —This aspect is concerned with the presentation of content and learning experiences. The main focus of process aspect is to create the learning situations for providing appropriate learning experiences to the learners. Therefore, the teaching strategies and tactics are selected for achieving the specified objectives.

The communications strategy and audio-visual aids are employed for the effective presentation of the content. The process also includes the technique of motivation, so that student's behavior can be reinforced for the desirable responses. The process implies the interaction of teacher and students.

Output —This aspect of instructional procedure is concerned with the 'Real Learning Outcomes' (RLOs). In the process aspect learning experiences are provided for the desirable change in students behaviors. The change in behaviors is known as the 'Real Learning Outcomes' (RLOs). The various measuring devices are employed to measure the RLOs. The evaluation devices are specified for measuring the criterion behaviors.

Main features of this approach are:

1. This approach makes use of concept of system approach to education.
2. The three main steps involved in this approach are input, process and output. In actual lesson planning scheme based on RCEM approach, these aspects are known by the term Expected Behavior Outcomes (EBOs), Communication Strategy (CS) and Real Learning Outcomes (RLOs). These aspects resemble the introduction, presentation and evaluation phase of a traditional lesson plan.

Check your Progress - 2

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. _____ approach was developed in the Regional College of Education Mysore.
2. _____ is concerned with the identification of objectives.
3. _____ is associated with the presentation of content and learning experiences.
4. The output aspect of instructional procedure is concerned with the _____
5. Input may also be termed as _____

9.5 LET US SUM UP

We have discussed the Herbartian approach and RCEM approach of teaching. Lesson planning is very essential as it helps the teacher conduct his/her lesson in an orderly fashion and it allows students to know what they are going to be learning and how it fits into the course syllabus. Lesson plan is a written description of education process in which it is shown what, when, where and with which method learners should learn and how they should be assessed.

9.6 LESSON END EXERCISE

1. Discuss in detail various steps of Herbartian lesson planning.
2. What are the major features of RCEM approach?
3. What are the salient features of Herbartian lesson planning.
4. Discuss merits and demerits of RCEM approach?
5. What are the difference between the Herbartian and RCEM approach?

9.7 SUGGESTED FURTHER READINGS

Houston, D., & Beech, M. (2002). Designing lessons for the diverse classroom a Handbook for teachers. Florida: Department of Education.

Kameshwari, A. H., & Krishnaiah, R. (2017). Pedagogy of Social Science.New Delhi: Bookman Publishers.

Killen, R. (2010). Teaching strategies for quality teaching and learning. Cape Town: Juta.

Yokam, G. & Simpson, R. G. Modern methods of techniques of testing. London: Oliver and Boyd Ltd.

9.8 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress- 1 : 1. True, 2. False, 3. True, 4. True, 5. True.

Check Your Progress-2 : 1. RCEM, 2. INPUT, 3. Process, 4. Red learningOutcomes, 5. Expected behavioural outcomes.

LESSON NO: 10 UNIT-III

PREPARING A LESSON PLAN ON A TOPIC OF SOCIAL SCIENCE

10.0 STRUCTURE

10.1 Introduction

10.2 Objectives

10.3 Lesson Plan based on RCEM Approach

10.4 Constructivist Approach

10.5 Lesson Plan based on Constructivist Approach

10.6 Remedial Teaching

10.7 Let Us Sum Up

10.8 Lesson End Exercise

10.9 Suggested Further Readings

10.10 Answers to Check Your Progress

10.1 INTRODUCTION

All of us are aware of the importance of planning in our life. All kinds of activities requireplanning. Planning for anypurposeful activityshows results. In addition, planning leads to shared understanding and acceptance of clear and attainable goals. In teaching-learning process planning of instructional activities enhances students' performance. Planning can give both teachers and students a sense of direction.

10.2 OBJECTIVES

After going through this lesson, you shall be able to:

- describe various steps involved in Herbartian approach,
- organise constructivist classroom activities, and
- prepare lesson plan based on the principles of Constructivism.

10.3 LESSON PLAN BASED ON RCEM APPROACH

Date: Name: Roll No.:
Class:
Subject: Social Science Topic: Revolts in India Time: 40 Minutes

Input

1. Teaching points

   i. Knowledge of the national movements in India.

   ii. To create the interest of the student in the lesson.

   iii. Intensive comprehension of the lesson.

2. Objectives of the Lesson

   i. To develop the power of imagination among students.

   ii. To help of students to gain knowledge about the facts related to national movements.

3. Expected Behavioural Objectives (EBO's)

   i. The students will able to know about the national revolts of India.

   ii. The students will able to learn the lesson with proper understandin

4. Teaching Aids

   I. General Aids: Chalk , blackboard ,duster ,pointer ,rolling board.

   II. Specific Aids: A model representing different national heroes of India.

(B) Process

1 Motivation: Before delivering the topic, the pupil-teacher will put some questionto the students

(i) What is the name of our country? Ans: India.
(ii) Who was ruling our country before Independence? Ans: Britishers.
(iii) Why did they came to India? Ans: For Trade.
(iv) What happened because of their atrocities? Ans: No response.

2 Announcement of the Topic

Finding no response from the students, the pupil-teacher announces the topic"Revolts in India" and writes it on the black board.

3. **PRESENTATION**

Matter **1**	**Method** **2**	**B.B. Summary** **3**
In 1857, the Indian army and the people of India revolted against British Power. This was the first attempt to get freedom from British Imperialism. Historians are divided amongst themselves on this issue. According to some it was only sepoy revolt and still others consider it as an attempt to get back the lost freedom while others view it as the national struggle for freedom. Whether the revolt was pre-planned or not, or people took part in it as one nation or not some historians believe this revolt suddenly occurred when soldiers were compelled to use the cartridgess having cow's fat. Others take it as a pre-planned development. The people took part in it, to get freedom for India by bringing an end to the British rule. Common people - Hindus and Muslims participated alike in this struggle Kr. Singh, Rani Laxmi Bai, Tantya Tope, Mughal Emperor Bahadurshah, Nanasahib the leaders of this struggle and sacrificed their lives to get freedom for their country. **Causes:** There were following causes of the first war of Independence. **(i) Political Causes :** From Lord Wellesly to Lord Dalhousie almost all Governor General followed the policy of extending the British empire by fair or fowl means. The Maratha states were liquidated. Sind and Punjab were forcibly annexed. The Nawab of the Sind was deprived of his Nawabship. Satara, Jhansi, Nagpur, Udaipur were merged, in the English	When did the Indian army revolt against the British power? What are the views of different historians about the first war of independence? Who are the leaders of this struggle.	In 1857 Some called it a revolt, others an attempt to get back the lost freedom for trade Rani of Jhansi Laxmi Bai, Mughal Emperor Bahadurshah Tantya Tope

Matter 1	Method 2	B.B.Summary 3
kingdom Since their rulers were issueless. The pension of the Peshwa was discontinued. Owing to merger of states, many soldiers were rendered unemployed. Bahadur Shah lost his throne, this angered the Muslims.	Which states were merged in the British kingdom?	Satara, Jhansi, Nagpur, Udaipur, Sind, Punjab
(ii) Military Causes. Indian were in big number in the English army. According to the new rule, they could be sent to all places, across the seas. This created discontent since it was against their religions. Again, they were given cartridges having pig and cow's fat. Because of the merger of the Indian states, their armies were disbanded. Those unemployed soldiers became bitter enemies of the Britishers.	Why were the Indian soldiers discontented	Because of inter-ference in their religion.
(iii) Religious Reasons. The clergies were extensively propagating Christianity among Indian people. They enticed the simple folk, by giving money and converting them to Christianity. In addition the people were displeased because of the rules for printing about social reforms. The Britishers committed a blunder by changing law of inheritance. People thought that the Britishers were trying to convert them to Christianity.	How were the Britishers preaching their religion?	Through conversions and use of money.
(iv) Economic Causes. Indian industrialists and traders were also displeased with the	Why were the Indian traders	Because of the destruction of their

Matter 1	Method 2	B.B.Summary 3
Britishers as their trade was destroyed because of their policy. The ritishers would export raw material from India to England, and get back the finished goods. These were more beautiful and used to be sold cheap. Indians became unemployed. Events. The Britishers besieged Delhi with the help of the Punjab army. Delhi was recaptured after three months. Bahadur Shah was imprisoned. He was deported to Rangoon and his sons were beheaded. Nanasahib at Kanpur, first proved more than a match to the Britishers but in the end he was defeated and Kanpur was captured General Campbell quelled revolt at Lucknow, Laxmi Bai, the Rani of Jhansi bravely encountered the English but became a martyr while fighting. In Madhya Pradesh, Tantya Tope was arrested and hanged.	and Industrialisation angry with the Britishers? What was the reason for unemployment in India? What were the main events of the revolt?	trade. Destruction of industries and commerce in India. Delhi was recaptured Bahadurshah was departed to Rangoon, Nanasahib was defeated at Kanpur.
Result. The revolt failed and the British supremacy was established. Queen Victoria was proclaimed as the Empress of India. A secretary of state appointed for Indian affairs in British cabinet.	What were the changes brought about in Indian was Politics?	Victoria became the Empress of India. A secretary of state for India was appointed in English cabinet.

Matter 1	Method 2	B.B.Summary 3
Causes of the Failure of the War. 1. It was confined only to a limited part of Northern India. Punjab, Bombay and the South remained completely aloof and helped the Britishers in suppressing the revolt. 2. Except Tantya Tope and Laxmi Bai, there was no leader to yoke the entire country for achieving the common goal. 3. The revolt did not start at the same time and at all places. Post and telegraph functioning, was a major cause of failure of the revolt.	What were the causes of its failure.	1. It was confined to only few parts of Northern India. 2. There was no powerful leader to unite the whole country. 3. The revolt did not start at the same time and at all places simultaneously.

(C) Output

C1. Real Learning Outcomes (RLO's).

A

(i) Which states were merged into the British kingdom?

(ii) What was the religious cause of revolt of 1857?

(iii) What was the military cause of this revolt?

B

Fill in the blanks :

1. Indian Army revolted against the Britishers in _

2. The _____ Nawab was deprived of his Nawabship.

3. The Britishers besieged _

C2. Home Assignment

_ __ with the help of the Punjab army.

Q.1. What were the causes of breakout of revolt of 1857?

Q.2. What was the result of the revolt?

10.4 CONSTRUCTIVIST APPROACH

Constructivist teaching is based on constructivist learning theory. Constructivist teaching is based on the belief that learning occurs as learners are actively involved in a process of meaning and knowledge construction as opposed to passively receiving information. Learners are the makers of meaning and knowledge. Constructivist teaching fosters critical thinking and creates motivation and independent learners. This theoretical framework holds that learning always builds upon knowledge that a student already knows; this prior knowledge is called a schema. Because all learning is filtered through pre-existing schemata, constructivists suggest that learning is more effective when a student is actively engaged in the learning process rather than attempting to receive knowledge passively. A wide variety of methods claim to be based on constructivist learning theory. Most of these methods rely on some form of guided discovery where the teacher avoids most direct instruction and attempts to lead the student through questions and activities to discover, discuss, appreciate and verbalize the new knowledge.

Characteristics of Constructivist Teaching

One of the primary goals of using constructivist teaching is that students learn how to learn by giving them the training to take initiative for their own learning experiences.

According to Gray, the characteristics of a constructivist classroom are as follows

- the learner are actively involved
- the environment is democratic
- the activities are interactive and student-centered
- the teacher facilitates a process of learning in which students are encouraged to be responsible and autonomous

Furthermore, in the constructivist classroom, students work primarily in groups and learning acquired knowledge are interactive and dynamic. There is a great focus and emphasis on social and communication skill, as well as collaboration and exchange of ideas. This is contrary to the traditional classroom in which students work primarily alone, learning is achieved through

repetition, and the subjects are strictly adhered to and are guided by a textbook.

Some activities encourage in constructivist classrooms are

- Experimentation: Students individually perform an experiment and then come together as class to discuss the results.
- Research projects: Students research a topic and can present their findings to the class.
- Field trips: This allows students to put the concepts and ideas discussed in class in a real- world context. Field trips would often be followed by class discussions.
- Films: These provide visual context and thus bring another sense into the learning experience.
- Class discussions: This technique is used in all of the methods described above. It is one of the most important distinctions of constructivist teaching methods.

Role of Teacher

In the constructivist classroom, the teachers' role is to prompt and facilitate discussion. Thus, the teachers' main focus should be on guiding students by asking questions that will lead them to develop their own conclusions on the subject.

10.5 LESSON PLAN BASED ON CONSTRUCTIVIST APPROACH

Name: Unit: Nature

Class: VI Topic: Erosion and Deposition

Subject : Geography Duration: 30 minutes Approach to Teaching-Learning: Constructivist approach

I) Learning Objectives

Students will be able to

- describe the processes of erosion, transportation and deposition by creating a physical model.
- identify and label erosion and deposition.

II) Materials Needed

• paint tray (the kind used for a paint roller)

• pieces of sod (enough for each group)

• potting soil

• heavy clay like soil

• Rainmaker (paper cup with about ten tiny holes poked in the bottom)

• Water

III) Pre-Requisite

The students are already familiar with soil, its type and composition.

Stage 1 Engage (Group Work)

The teacher divides the students into two groups and asks them to go around the school building and ask them to note where the soil is worn away or seems to have collected. Before going on the walk teacher may explain what they will look for or what are the signs that soil has worn away or built up like erosion - puddles, hollowed out areas, areas that dip or are lower than the surrounding area; deposition - mounds of dirt, collection of soil or other materials in a certain spot, etc. Afterwards the leaders of both groups read out their list of the sites where soil was worn away or collected and write them on the blackboard.

Engagement Examples: • bottom of slide under swing

• end of splash guard by rain spout at entrance to door

• path leading to the playground at the bottom of slope

Stage 2 Explore (Introduction to the Topic)

Based on the discussion, the teacher asks the following questions

Teachers' Activity	Students' Response (Expected)
Do you notice anything different about these areas?	They are just dirty; no grass is growing here.
What do you think caused these changes?	Students walking over them; water running through it.

Next, the teacher shows pictures related to landscape and soil erosion. Construct a

model to investigate how these changes may have occurred. Provide materials so the students can construct their own model of a landscape. It should include a piece of sod, fine potting soil, and heavy clay like soil. Have them use a paint roller tray as the base of the landscape. Do not put any landscape materials in the bottom well; it should remain empty. Once students have constructed their models have them diagramed and label their models and make a prediction as to what will happen if it "rains" on their landscape.

One student pours a cup of water all at once into the rainmaker. Hold the rainmaker about 4 inches above the upper end of the landscape and slowly move it back and forth so the water "rains" down on the model landscape. Observe what happens to the landscape. When it finished raining, have the students observed the final effects of the rain on their landscape. Have students go back to their predictions and record what actually happened.

Announcement of the Topic

After having the above discussion with the learners, the teacher announces that today let us discuss and learn the process of erosion, transportation, and deposition of the earth's land surface.

Stage 3 Explain (Presentation)

Based on the activity, the teacher asks the following questions

Teachers' Activity

Tell me what were some of your predictions before it rained on your landscape. (Record on board.)

What actually happened to your landscape when it rained on it? (Record so you can make comparisons.)

How is your landscape different after the rain than before it rained on it? What happened to the soil? Where did it go? Why did this happen?

Students' Response

As students share their ideas and understandings, record key phrases on the board. Some phases that may be valuable to your later discussion may include:

• dirt and soil washed away

• the soil collected at the bottom of the slope

• the water hollowed out the soil

• the rain carried the soil down the hill

• when the water washed away the soil it formed a hole

Relate their observations to the processes scientists observe over an extended period of time. The teacher uses student models to identify and label erosion and deposition. Have students work to create definitions for these terms. When teacher is sure that students have a real understanding of the terms, formulate a final definition and post on board or chart in the classroom for future reference. The teacher demonstrate the process of transportation and lead students to understand that it is the movement of soil particles from one place to another. Refer to the list generated during the engagement and have students make connections; they should use the new terms to discuss and explain what they saw. The teacher helps them to understand that they just used water to simulate erosion, transportation and deposition, but it can also be caused by wind, people, animals, etc.

Stage 4Elaborate

1. Using the same paint roller tray as the base for their landscape, have the groups of students plan a method to decrease or eliminate erosion. Students should draw a diagram of the model planned and label the materials used in their landscape. They should write a short explanation explaining whytheythink this will work to curb erosion. (Tell students that you will provide the same materials that they used today and they are responsible for supplying the rest of the materials to build their new landscapetomorrow.)

2. Have students use a variety of resources and references to research various landmarks that are the result of these processes (e.g. Grand Canyon, Mississippi River Banks, etc.). The teacher can then lead a class discussion on the topic: Erosion and Deposition - Help or Hindrance?

Recapitulation

The students summaries the concept of erosion, transportation and deposition of land soil.

Stage 5 Evaluate

1. Have photographs representing each process and have students identify and explain why they identified it as such.

2. Have students take a walk in their own neighborhood tonight to find examples of each process. They should draw and write one sentence telling what they observed.

3. Have students write their own definition and list an example for each process in their science journals.

Check Your Progress - 1

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. Constructivist teaching fosters _____ and creates motivated and independent learners.
2. In constructivist classroom, the teacher's role is to prompt for facilitate _____
3. According to _____ one of the feature of constructivist classroom is that the environment is democratic.
4. _____ allows students to put the concepts and ideas discussed in class in a real world context.
5. _____ provide visual context for bring another sense into the learning experience.

10.6 REMEDIAL TEACHING

Diagnostic testing is a method of identifying the students who are experiencing learning difficulties. Remedialinstruction or teaching helps in overcoming the difficulties due to instruction. It helps the students to be with the normal students in acquiring the common level of achievement.

Definitions

The dictionary meaning of the term 'remedial teaching' given by Carter is "Remedial teaching means special instruction intended to overcome in part or in whole anyparticular deficiencyof pupil not due to inferior general ability, for example, remedial reading instruction for

pupils with reading difficulties."

Yokam defined "Remedial teaching tries to be specific and exact. It attempts to find a procedure which will cause the child to correct his errors of the past and thus in a sense prevents future error."

Blair defined "Remedial teaching of course has one of its chief functions the remedying or removal of the effects of originally poor teaching and poor learning. It is thus concerned with the pupil who for one reason or another has formed ineffective methods of handling the tools of education. It is based upon careful diagnosis of defects and causes and aims to correct weaknesses and eliminates bad habits whichmay be found".

From the above definitions, it is clear that remedial teaching is a special instruction. It is intended to overcome the difficulties of the students related to instruction. It is based upon careful diagnosis of defects and causes. It eliminates bad habits of learning. It also prevents future errors.

Features of Remedial Teaching

1) Remedial instruction is a dynamic side of the diagnostic testing. Hence, it depends on the educational diagnosis.

2) To overcome the difficulties in learning and acquisition of skills is the main purpose of remedial instruction.

3) Remedial instruction is not onlyuseful to cure the shortcomings but also in preventive measures.

4) Remedial instruction is a short term treatment.

5) Remedial instruction helps the below average students to be with the normal students in acquiring the common level of achievement.

Principles and Suggestions in Remedial Teaching

Blair has given following principles in remedial teaching

i) Begin where the pupil is.

ii) The pupil should be frequently informed of his progress.

iii) The work must be real and vital to the pupil.

iv) Definite satisfaction on the part of the pupil should accompany the work.

v) Abundant and varied exercises and activities should be provided.

Following are some suggestions about Remedial Instruction

1) Do not think that the pupil needing remedial measure is a dull one.

2) Do not assume that brilliant students need not require remedial measures.

3) Never start remediating without diagnosing the difficulties.

4) Remedial measures are not only essential in cognitive domain but also in affective and psychomotor domain.

From the above principles and suggestions, it is clear that the teacher should consider all the factors causing difficulties in learning. Sympathy to the students is also an important aspect of remedial instruction. The difficulties at affective or psychomotor domain may cause learning difficulties. Teacher should investigate and overcome the difficulties. Remedial instruction should be given according to the areas of difficulties. Teacher should classify the students according to the categories and instruct. Remedial instruction needs remedial instructional materials and graded assignments as per the areas of difficulties.

Check Your Progress - 2

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. The dictionary meaning of the term remedial teaching was given by carter. (True/False)
2. According to Yokam remedial teaching is not specific and exact. (True/False)
3. Remedial teaching is based upon careful diagnosis of defects and causes. (True/False)
4. Remedial teaching is a long term treatment. (True/False)
5. Remedial instruction is not only useful to cure the short comings but also in preventive measures. (True/False)

Instructional Materials for Remedial Teaching

The nature of instructional materials for remedial instruction depends upon the nature of difficulties of the pupils, the level of pupils and the causes of the difficulties.

Gates has made a following statement about the materials for remedial instruction "For remedial material interesting matter of idea almost any sort either already in print or made up of the purpose, may be used in combination with almost any type of question or direction device, if the pupil works by himself, keys may be provided for most of the exercises so that the learner may correct his own errors. Remedies are to be achieved by arranging the work so that errors become obvious and tolerated so that improvement is discreened and approved."

There is variety of instructional materials as charts, flash cards, programmed learning booklets, graded assignments, audiocassettes, video cassettes, auto cued learning materials, computer aided learning materials etc.

A Sample Plan of Work for the Remedial Class

Mode of operation: additional lessons / withdrawal (setting) / withdrawal (partial withdrawal)
Level:

Remedial Group: Teacher-in-
charge:

Date/ Period	Key Stage Targets	Reference/ Resources/ Learning Activities	Assessment	Remarks/ Actual Progress

10.7 LET US SUM UP

In this lesson, RCEM approach of lesson plan is explained with help of example. The

importance of constructivism in the field of education has been elaborated. A suggestive example of constructivist based lesson plan was presented. The term remedial teaching in a broader sense is explained as teaching which is developmental in its scope. It is based upon careful diagnosis of defects and in general to the needs and interest of pupils.

10.8 LESSON END EXERCISE

1. Prepare a lesson plan on any topic of your choice based on RCEM approach.
2. Prepare a lesson plan on any topic of your choice based on constructivist approach.
3. Explain the role of instructional material and teacher in Remedial Teaching.

10.9 SUGGESTED FURTHER READINGS

Blair, G. M. (1956). Diagnostic and remedial teaching. New York: The McMillan Company.

Carter, G. V. (1973). Dictionary of education. New York and London: Mc Graw Hill Book Co.

Gates, A. I. (1972). A programme of diagnostic and remedial methods. New York: The McMillan Company.

Houston, D. & Beech, M. (2002). Designing lessons for the diverse classroom a Handbook for teachers. Florida Department of Education.

Kameshwari, A. H., & Krishnaiah, R. (2017). Pedagogy of Social Science. New Delhi: Bookman Publishers.

Killen, R. (2010). Teaching strategies for quality teaching and learning. Cape Town: Juta.

Richardson, V. (2005). Constructivist teacher education. London: FalmerPress.

Yokam, G. & Simpson, R. G. Modern methods of techniques of testing. London: Oliver and Boyd Ltd.

10.10 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress- 1. : 1. Critical thinking, 2. Discussion, 3. Gray, 4. Field trips, 5. Films.

Check Your Progress-2. : 1. True, 2. False, 3. True, 4. False, 5. True.

LESSON NO: 11 UNIT-IV

DISTRIBUTION OF RESOURCES

STRUCTURE

11.1 Introduction

11.2 Objectives

11.3 Distribution of Resources

11.3.1 Types of Resources

11.3.2 Implications of Resources

11.4 Environmental Degradation and its Preservation

11.4.1 Types of Environmental Degradation

11.4.2 Causes of Environmental Degradation

11.4.3 Effects of Environmental Degradation

11.4.4 Precautions to save Environment from Environmental Degradation

11.5 Disasters and Preparedness

11.5.1 Types of Disasters

11.5.2 Effects of Disasters

11.5.3 Disaster Management Cycle

11.5.4 Disaster Preparedness

11.6 Interdependence and Interaction Across Space

11.7 Migration of People

11.7.1 Types of Migration

11.7.2 Causes of Migration of People

11.7.3 Effects of Migration

11.8 Transport and Communication

11.8.1 Transport

11.8.2 Communication

11.8.3 Importance of Transportation and Communication in Development

11.9 Trade and Commerce

11.9.1 Trade

11.9.2 Commerce

11.9.3 Key Differences between Trade and Commerce

11.10 Let Us Sum Up

11.11 Lesson End Exercise

11.12 Suggested Further Readings

11.13 Answers to Check Your Progress

11.1 INTRODUCTION

A resource is a source or supply from which a benefit is produced. Resources can be broadly classified on the basis upon their availability. There are renewable and non renewable resources. They can also be classified as actual and potential on the basis of level of development and use, on the basis of origin they can be classified as biotic and a biotic, and on the bases of their distribution, as ubiquitous and localized (private resources, community own resources, natural resources, international resources).An item becomes a resource with time and developing technology. Typically resources are materials, energy, services, staff, knowledge, or other assets that are transformed to produce benefit and in the process may be consumed or made unavailable. Benefits of resource utilization may include increased wealth or wants, proper functioning of a system, or enhanced well being. From a human perspective a natural resource is anything obtained from the environment to satisfy human needs and wants. From a broader biological or ecological perspective a resource satisfies the needs of a living organism. In the present chapter, discussion is about, distribution of resources, environmental degradation and its prevention, interdependence and interaction across space, migration of people, transport and communication, trade and commerce.

11.2 OBJECTIVES

After going through this lesson, you shall be able to:

- explain about the resources,
- identify different type of resources,
- discuss about environment degradation and its preservation,
- explain in reasons behind migration of people,
- discuss role of transport and communication, and
- discuss concept of trade and commerce.

11.3 DISTRIBUTION OF RESOURCES

Resources in a wider sense may be grouped into renewable or non-renewable resource. It is renewable when we talk of crops and other forest resources which may take a short period of time to grow and be harvested while the non- renewable resources are those things that take millions of years to form and these are usually found deep down the earth crust. There is an increasing demand for natural resources from a rapid growing global population; especially those in most developed countries, the world's resources are being used up more quickly. The consumption of resources is spread unequally between most developed worlds that use more resources than the less developed world.

Resources are defined as the possessions of a country in the form of wealth and goods that helps one to achieve what he wants (Dictionary of contemporary English, 1985). In actual sense resources are defined as materials, money, energy, assets, services, staff, knowledge, or other assets that are transformed to produce benefit and in the process may be consumed or made unavailable. They are distributed all over the earth and have specific importance such at create wealth or wants, aids in proper functioning of a system, or enhances the wellbeing of people.

Resource is any means of support or anything a man or a country uses to take care or support himself or the nation. According to the Chamber dictionary, resource is defined as a source of possibility of help or means of raising money to support oneself. It could be any form of human and natural appraisal, which varies overtime and space. However, resources refer to the sum total of wealth or sources of wealth of a person or country.

Based on the above definitions, resource can be classified or grouped under two main categories; (i) natural and (ii) human resources. It is important to note that the use of natural resources is controlled by certain factors. The factors include the level of technology, population, demand, and capital and government policy. Resources are not evenly distributedon the surface of the earth; some places are well endowed while some other places are not. In some developing countries, the most

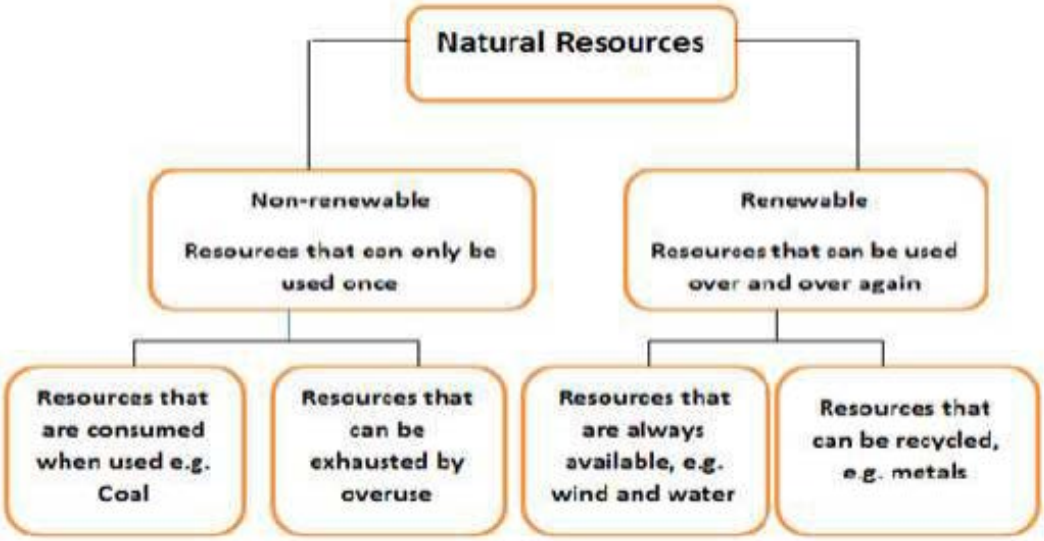
important resources are the agricultural products and large expanse of water bodies which are used for the generation of hydroelectric power, tourism, irrigation and fishing etc.

11.3.1 Types of Resources

Resource distribution refers to the distribution of resources, including land, water, minerals, fuel and wealth in general among corresponding geographic entities. Basically there are six different types of resources as below:

(i) Natural Resources: Natural resources are resources, which are not and cannot be provided for by man through his initiative skills, but are only provided for by nature itself or by the Almighty deity. They are technologically accessible, economically feasible and culturally acceptable. A natural resource may exist as a separate entity such as fresh water, air, and as well as a living organism such as a fish, or it may exist in an alternate form that must be processed to obtain the resource such as metal ores, rare earth metals, petroleum, and most forms of energy. Natural resources which are widely scattered all over the earth and are unevenly distributed , these include the flora and fauna, the mineral deposits, water bodies, consisting of sea, river, ocean streams and lake, weather and climate, wind, rocks and other naturally occurring resources. Examples of the mineral resources are crude oil, soil, iron ore, gold, tin, silver, bauxite, and bronze. Various forms of agricultural resources include food stocks (rice, sorghum, cocoa, cotton, coffee, and palm produce). The power resources include coal, crude oil and water for hydroelectric power generation, natural gas, the nuclear and the solar sources of power generation. Land is an important resource because it determines a lot of human activities particularly in the areas of agriculture.

(ii) Renewable resources: Renewable can be described by scientists as a resource that can be replenished or reformed either naturally or by systemic recycling of used resources. Renewable is resource or source of energy that is replaced naturally or controlled carefully and can therefore be used without the risk of finishing it all (Oxford dictionary).



Another way to define a resource is that is able to be renewed and be capable of being begun or done again. Renewable resources are usually living resources such as plants and animals and they also include air and water. These resources are termed as 'renewable' because they can usually reproduce or restock themselves. Renewable resource sare significant aspect of sustainability. Renewable resources are valuable becausethey provide green energy. Renewable natural resources include those resources beneficial to human economies that demonstrate growth, maintenance, and recovery from exploitation over an economic planning horizon. The natural environment, with soil, water, forests, plants and animals are all renewable resource. In the case of air and water, they are renewable elements because they exist as part of a cycle which allows them to be reused. Renewable resources can only exist as long as they are not being used at a greater rate than they can replenish themselves.

(iii) Non-renewable resources: Non-renewable resources cannot be re-produced or re- grown and are, therefore, they are available in limited supply. Scholars affirmed that Non- renewable resource is a natural resource that does not renew itself at a sufficient rate for sustainable economic extraction in meaningfull human time frames. Non-renewable resources are resources for which there is a limited supply. The supply comes from the Earth itself and, as it typically takes millions of years to develop, is finite. Non-renewable resources can generally be separated into two main categories; it includes Fossil fuels, nuclear fuels.

Coal is considered a non-renewable resource because even though it is continually being formed, it is incapable to refill its stock at a rate which is sustainable. Anon-renewable resource cannot maintain the demands for current human needs while still preserving theecosystem for future generations.

(iv) Human resources: Human resources are those resources that cannot be touched or felt, rather they are found in human ingenuity of the population but this is perhaps the most important type of resources for the effective functioning and coordination of a country. Human resources are the most important and vital for the economic development, they are the agent of development. They act as an asset for coordinating other resources due to the wide knowledge.

(v) Environmental resources: Environmental resource are those things which are endowed by nature, they are referred to as elements of the human environment such as the organic and inorganic material plants (both natural and built resources) which are of great value to man, animal and. The difference between natural resources and environmental resources is that natural resources are provided by the earth, or by Mother Nature, while environmental resources are something that can be taken from the environment. Examples of environmental resources include food from plants and animals, wood for cooking, heating, and building, metals, coal and oil.

(vi) Mineral resources: Mineral resources are natural resources endowed by nature which are found in rocks in several layers within the earth surface and beneath usually in small quantity. Examples of mineral resources include minerals like Gold, Silver, Tin, Copper, Lead, Zinc, Iron, Nickel, Chromium, and Aluminum.

(vii) Water resources: Water resources water resources are those things that are derived from water bodies and are of great benefits to man and his environment. Water resources are also referred to sources of water that are useful or potentially useful. Uses of water include for agricultural uses, generation of electricity, industrial uses, household uses, recreational uses and environmental activities. Some sources of water include, rain, sea, stream, lake, pond, bore hole and well.

(viii) Vegetation resources: Vegetation resources are those things, which are derived from the forest, and savannah vegetation and are of immerse important to man, animals and plants, it is a key component of an ecosystem and, as such, is involved in the regulation of various biogeochemical cycles, e.g. water, carbon, nitrogen. Vegetation provides habitat to wildlife and ecosystem services such as food and fuel, timber, cash crops, pulp, fruits, robes, clothes and many game reserve.

11.3.2 Implications of Resources

Following are the implications of various resources to human being:

1. Wind is a natural resource harnesses for powering windmills, it helps to modify weather and climatic conditions of various places in the world.

2. Solar energy helps in warming the earth, it aids in drying of clothes and also natural source of

vitamin D.

3. Rain is an important source of water, which aids plant growth; it is an important source of underground water for man and animals use.

4. Minerals provide raw materials for industrial uses, the major types of minerals include crude oil which are refined into (petrol, diesel, natural gas), limestone for cement and feldspar for ceramics.

5. Mineral resources promote the growth of settlements in different locations of the world and also help to boast the economy of the country. It also promotes development of infrastructure such as electricity, pipe borne water and construction of road, bridges and rails.

6. Water resources like the ocean, river and lake are often used as means of transportation for conveying people and goods from one location to another; various water bodies are also used for the generation of electricity.

7. Large water bodies such as ocean, rivers and lakes help provide employment opportunities for ship builder, fishermen, canoe carvers and host of others.

8. Forest and savannah vegetation serve as tourist centers which generate foreign exchange earnings to the countries where they are located. Vegetation is also a source of economy. Trees which are cut down such as timbers, these trees in turn produce planks used as materials for construction furniture's and buildings.

9. Forest trees give us oxygen, food and also various types of rare animals and economic plants that can be used for medicine and other purposes.

10. A lot of cash crops, foods crops, fruits and seeds are derived from the vegetation which now serves as food for man. Similarly, animals are equally gotten from the wilds, which serve as sources of protein for man.

11. Human resources are the basis for labou r supply needed for the positive economic growth and development. However, countries with large population coupled with technological development are able to tap their natural resources since all entail human effort.

Check Your Progress - 1

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. According to the _____ dictionary, resource is defined as a source of possibility if help or means of raising money to support oneself.
2. _____ resource can be replenished either naturally or by systemic recycling of used resources.
3. _____ resource can't be reproduced.
4. _____ is an important source of water.
5. In order to combat environmental degradation _ __ ___ __ __ are important.

11.4 ENVIRONMENTAL DEGRADATION AND ITS PRESERVATION

From the beginning of the Nineteenth century, the explosive growth, expansion and needs of the world's population accompanied by new technological advances have modified our Mother Earth's landscape. Man has exploited the natural resources in such a way that it leads to over-exploitation and losing the balance in natural eco-system. Environmental degradation to a large extent occurred. We know that, a living organism cannot live by itself. Organisms interact among themselves. Hence, all organisms, such as plants, animals and human beings, as well as the physical surroundings with whom we interact, form a part of our environment. All these constituents of the environment are dependent upon each other. Thus, they maintain a balance in nature. As we are the only organisms try to modify the environment to fulfill our needs; it is our responsibility to take necessary steps to control the environmental imbalances.

Environmental degradation is a process through which the natural environment is compromised in some way, reducing biological diversity and the general health of the environment. This process can be entirely natural in origin, or it can be accelerated or caused by human activities. Many international organizations recognize environmental degradation as one of the major threats facing the planet, since humans have only been given one Earth to work with, and if the environment becomes irreparably compromised, it could mean the end of human existence. Environmental Degradation is the process by which our environment i.e., air, water and land, progressively contaminated, over-exploited and destroyed. Degradation can be mainly grouped into (a) eco-system imbalance, (b) forest deterioration, (c) freshwater degradation (d) soil degradation (e) air pollution and (f) Global warming. In other words, when the environment becomes less

valuable or damaged, environmental degradation is said to occur. There are many forms of environmental degradation. When habitats are destroyed, biodiversity is lost, or natural resources are depleted, the environment is hurt. Environmental degradation can occur naturally, or through human processes. The largest areas of concern at present are the loss of rain forests, air pollution and smog, ozone depletion, and the destruction of the marine environment. Pollution is occurring all over the world and poisoning the planet's oceans. Even in remote areas, the effects of marine degradation are obvious.

In order to combat environmental degradation environmental studies are necessary. Environmentalstudiesarethesystematicstudyofhumaninteractionwiththeirenvironment. It is a broad field of study that includes the natural environment, social environments, organizational environments, and the relationships between them. Current environmental problems have evolved into a complex set of interdisciplinary issues involving gecological, political, economic, social, as well as physical and biological considerations. Necessary steps are to be planned after environmental studies and proper implementation of those suggested steps is essential. The environmental imbalance gives rise to various environmental problems. It is our duty to remove the environmental imbalance es by proper implementation of the necessary rectifications to make our environment safer, cleaner and greener.

Johnson et al., (1997), Environmental degradation is the deterioration of the environment through depletion of resources such as air, water and soil; the destruction of ecosystems; habitat destruction; the extinction of wildlife; and pollution. It is defined as any change or disturbance to the environment perceived to be deleterious or undesirable.

11.4.1 Types of Environmental Degradation

There are various forms or types of environmental degradation which occur in different regions and communities all over the world. The most common forms of Environmental Degradation are; Water pollution, Air pollution, Land pollution, Thermal pollution, Radiation Pollution, Noise pollution

(i) Water Pollution: Water pollution is the introduction into fresh or ocean waters of chemical, physical, or biological material that degrades the quality of the water and affects the organisms living in it. This process ranges from simple addition of dissolved or suspended solids to discharge of the most insidious and persistent toxic pollutants (such as pesticides, heavy metals, and non-degradable, bio accumulative, chemical compounds).

(ii) Air Pollution: Air pollution is the accumulation in the atmosphere of substances that, insufficient concentrations, endanger human health or produce other measured effectson living matter and other materials. Among the major sources of pollution are power and heat generation, the burning of solid wastes, industrial processes, and, especially, transportation. The six major types of pollutants are carbon monoxide, hydrocarbons, nitrogen oxides, particulates, sulphur dioxide, and photochemical oxidants.

(iii) Land Pollution: Land is often used as a recipient for treatment of wastes. Land also receives waste spills. Land pollution is the degradation of the earth's land surface through misuse of the soil by poor agricultural practices, mineral exploitation, industrial waste dumping, and indiscriminate disposal of urban wastes.

(iv) Thermal Pollution: Thermal pollution is the discharge of waste heat via energy dissipation into cooling water and subsequently into nearby waterways. The major sources of thermal pollution are fossil-fuel and nuclear electric-power generating facilities and, to a lesser degree, cooling operations associated with industrial manufacturing, such as steel foundries, other primary metal manufacturers, and chemical and petrochemical producers. The discharge temperatures from electric-power plants generally range from 5 to 11 C degrees (9 to 20 F degrees) above ambient water temperatures. An estimated 90% of all water consumption, excluding agricultural uses, is for cooling or energy dissipation. The discharge of heated water into a waterway often causes ecological imbalance, sometimes resulting in major fish kills near the discharge source. The increased temperature accelerates chemical-biological processes and decreases the ability of the water to hold dissolved oxygen. Thermal changes affect the aquatic system by limiting or changing the type of fish and aquatic biota able to grow or reproduce in the waters. Thus rapid and dramatic changes in biologic communities often occur in the vicinity of heated discharges.

(v) Radiation Pollution: Radiation pollution is any form of ionizing or non-ionizing radiation that results from human activities. The most well-known radiation results from the detonation of nuclear devices and the controlled release of energy by nuclear-power generating plants. Other sources of radiation include spent-fuel reprocessing plants, by- products of mining operations, and experimental research laboratories. Increased exposure to medical X-rays and to radiation emissions from microwave ovens and other household appliances, although of considerably less magnitude, all constitute sources of environmental radiation. Public concern over the release of radiation into the environment greatly increased following the disclosure of possible harmful effects to the public from nuclear weapons testing, the accident, 1979 at the Three Mile Island nuclear-power generating plant near Harrisburg,

Pa., and the catastrophic 1986 explosion at Chernobyl, a Soviet nuclear power plant. In the late 1980s, revelations of major pollution problems at U.S. nuclear weapons reactors raised apprehensions even higher. The environmental effects of exposure to high- level ionizing radiation have been extensively documented through post-war studies on individuals who were exposed to nuclear radiation in Japan. Some forms of cancer show up immediately, but latent maladies of radiation poisoning have been recorded from 10 to 30 years after exposure. The effects of exposure to low-level radiation are not yet known. A major concern about this type of exposure is the potential for genetic damage.

(vi) Noise Pollution: Noise pollution has a relatively recent origin. It is a composite of sounds generated by human activities ranging from blasting stereo systems to the roar of supersonic transport jets. Although the frequency (pitch) of noise may be of major importance, most noise sources are measured in terms of intensity, or strength of the sound field. The standard unit, one decibel (dB), is the amount of sound that is just audible to the average human. The decibel scale is somewhat misleading because it is logarithmic rather than linear; for example, a noise source measuring 70 dB is 10 times as loud as a source measuring 60 dB and 100 times as loud as a source reading 50 dB. Noise may be generally associated with industrial society, where heavy machinery, motor vehicles, andaircraft have become everyday items. Noise pollution is more intense in the work environment than in the general environment, although ambient noise increased an average of one dB per year during the 1980s. The average background noise in a typical home today is between 40 and 50 decibels. Some examples of high-level sources in the environment are heavy trucks (90 dB at 15 m/50 ft), freight trains (75 dB at 15 m/50 ft), and air conditioning (60 dB at 6 m/20 ft). In Nigeria noise is becoming a serious problem through road traffic, electricity generating sets, music during social events and industrial sources.

11.4.2 Causes of Environmental Degradation

Some environmental life species require substantial areas to help provide food, living space, and other different assets. These creatures are called area specific. At the point when the biome is divided, the vast patches of living space don't exist anymore. It gets to be more troublesome for the wildlife to get the assets they need in order to survive. The environment goes on, even though the animals and plant life are not there to help sustain it properly. Some of the causes of environmental degradation are as following:

(i) Land Disturbance: Amore basic cause of environmental degradation is land damage. Numerous weedy plant species, for example, garlic mustard, are both foreign and obtrusive. A rupture in the environmental surroundings provides for them a chance to start growing and spreading. These plants can assume control over nature, eliminating the local greenery. The result is territory with a

solitary predominant plant which doesn't give satisfactory food assets to all the environmental life. Whole environments can be destroyed because of these invasive species.

(ii) Pollution: Pollution, in whatever form, whether it is air, water, land or noise is harmful for the environment. Air pollution pollutes the air that we breathe which causes health issues. Water pollution degrades the quality of water that we use for drinking purposes. Land pollution results in degradation of earth's surface as a result of human activities. Noise pollution can cause irreparable damage to our ears when exposed to continuous large sounds like honking of vehicles on a busy road or machines producing large noise in a factory or a mill.

(iii) Overpopulation: Rapid population growth puts strain on natural resources which results in degradation of our environment. Mortality rate has gone down due to better medical facilities which have resulted in increased lifespan. More population simply means more demand for food, clothes and shelter. You need more space to grow food and provide homes to millions of people. This results in deforestation which is another factor of environmental degradation.

(iv) Landfills: Landfills pollute the environment and destroy the beauty of the city. Landfills come within the city due the large amount of waste that gets generated by households, industries, factories and hospitals. Landfills pose a great risk to the health of the environment and the people who live there. Landfills produce foul smell when burned and cause huge environmental degradation.

(v) Deforestation: Deforestation is the cutting down of trees to make way for more homes and industries. Rapid growth in population and urban sprawl are two of the major causes of deforestation. Apart from that, use of forest land for agriculture, animal grazing, harvest for fuel woods and logging are some of the other causes of deforestation. Deforestation contributes to global warming as decreased forest size puts carbon back into the environment.

(vi) Ruinous Agricultural Practices: Intensive agricultural practices have led to the decline in quality of most of our natural environments. Majority of farmers resort to converting forests and grasslands to croplands which reduce the quality of natural forests and vegetation cover. The pressure to convert lands into resource areas for producing priced foods, crops, and livestock rearing has increasingly led to the depreciation of natural environments such as forests, wildlife and fertile lands. Intensive agricultural practices destroy fertile land sand nearby vegetation cover due to the accumulation of toxic substances like bad mineral sand heavy metals which destroy the soil's biological and chemical activities. Runoffs of agricultural wastes and chemical fertilizers and pesticides into marine and freshwater environments have also deteriorated the quality of wild life

habitats, natural water resources, wetlands and aquatic life.

(vii) Chemical effluents: Effluents are another by-product of industries which poses threat to the environment, leather and tanning industries, petroleum industries and chemicalmanufacturing industries create major waste products which are released directly into nearby streams without treatment, creating river pollution and causing harm to aquatic life.

(viii) Transport: As the spending power of the population increases and as cars become available more, the number of vehicles on the road increases. The amount has grown exponentially in countries like India, Brazil and China and this is a point form of pollution which directly affects humans. Smog is a nuisance that is created because of vehicular pollution, and Hydro-Carbons released from engines are the cause of creation of lower level ozone that is harmful to humans.

(vii) Unprecedented Construction: Urban Heat Island is a direct cause of the unprecedented construction activities that are being carried out right now, and urban heat island causes trapping of pollutants. Urban Heat island is an effect caused due to trapping of solar radiation by concrete and cement which are materials which trap heat extremely well. Construction causes removal of vegetative cover which usually allows for better exchange of heat. This heat island effect causes constricted circulation of air, which traps pollutants released in urban areas and does not allow for mixing of the air, thus decreasing the air quality.

(viii) Secondary Pollutants: Secondary pollutants are ones that are not directly emitted; however they get created when primary pollutants react amongst themselves. Major amongst them is the creation of ozone from reaction between non-burnt Hydrocarbons and Nitrous Oxides. There are various other secondary pollutants and the reaction between these pollutants cause reactions that lead to formation of ozone holes. Stratospheric clouds are the main reaction sites for such pollutants.

(ix) High quantity of Exhaust gases: The biggest reason by far for all kinds of environmental degradation is the exorbitant amount of gases, harmful to the environment, which is released by the various industries. Prime amongst these gases are CO , SO and urse there are many more and these are the main culprits for ozone holes and global warming.

(x) Natural Causes: Things like avalanches, quakes, tidal waves, storms, and wildfires can totally crush nearby animal and plant groups to the point where they can no longer survive in those areas. This can either come to fruition through physical demolition as the result of a specific disaster, or by the long term degradation of assets by the presentation of an obtrusive foreign species to the environment. The latter frequently happens after tidal waves, when

reptiles and bugs are washed ashore.

11.4.3 Effects of Environmental Degradation

Following points describe the effect of Environmental degradation:

- Impact on Human Health: Human health might be at the receiving end as a result of the environmental degradation. Areas exposed to toxic air pollutants can cause respiratory problems like pneumonia and asthma. Millions of people are known to have died of due to indirect effects of air pollution.
- Loss of Biodiversity: Biodiversity is important for maintaining balance of the ecosystem in the form of combating pollution, restoring nutrients, protecting water sources and stabilizing climate. Deforestation, global warming, overpopulation and pollution are few of the major causes for loss of biodiversity.
- Ozone Layer Depletion: Ozone layer is responsible for protecting earth from harmful ultraviolet rays. The presence of chlorofluorocarbons, hydro chlorofluorocarbons in the atmosphere is causing the ozone layer to deplete. As it will deplete, it will emit harmful radiations back to the earth.
- Loss for Tourism Industry: The deterioration of environment can be a huge setback for tourism industry that rely on tourists for their daily livelihood. Environmental damage in the form of loss of green cover, loss of biodiversity, huge landfills, increased air and water pollution can be a big turn off for most of the tourists.
- Economic Impact: The huge cost that a country may have to borne due to environmental degradation can have big economic impact in terms of restoration of green cover, cleaning up of landfills and protection of endangered species. The economic impact can also be in terms of loss of tourism industry. As you can see, there are a lot of things that can have an effect on the environment. If we are not careful, we can contribute to the environmental degradation that is occurring all around the world. We can, however, take action to stop it and take care of the world that we live in by providing environmental education to the people which will help them pick familiarity with their surroundings that will enable to take care of environmental concerns thus making it more useful and protected for our children and other future generations.

- Poverty: In the majority of developing countries, poverty is attributed to poor crop harvests and lack of quality natural resources that are needed to satisfy basic survival needs. The inadequacy

basic survival resources and lack of quality of food is the direct result of environmental degradation in the regions. Most vulnerability situations brought about by water shortages, climate change, and poor crop yields in developing countries are tied to environmental degradation. Hence, the lack of access to adequate basic needs such as water and food directly induce poverty.

- Atmospheric Changes: Environmental degradation can alters some of the natural process such as the water cycle and the normal processes of animal and plant activities. Also, environmental degradation aspects such as deforestation and mining destroy the natural land cover. This, together with air, water, and land pollution poses everal atmospheric alteration threats. The alterations include global warming and climate change which can increase the risks of climatic natural disasters, and ozone layer depletion which increases the risk of skin cancer, eye disease, and crop failure.
- Scarcity of Natural Resources: Environmental degradation through aspects such as over-exploitation of natural resources, pollution, and deforestation can contributes to the scarcity of resources particularly arable land, water, genetic resources, medicinal plants, and food crops.
- Discard of Civic Norms: General public in India is not a respecter of civic norms. People abuse it. For instance, no cleanliness on roads, littering of roads with rubbish, drains remaining choked with silt and refuse, excessive use of loud- speakers, etc. All these factors add to environmental pollution. In short, whereas on the one hand,' environment has degraded as a result of rapid industrialization and urbanization. On the other, due to neglect of civic norms by the people, the process of pollution has assumed a permanent character.

11.4.4 Precautions to Save Environment from Environmental Degradation

The degradation of environment is thus a very serious concern. And it is occurring primarily due to excessive and reckless exploitation and unscientific management of natural resources. In fact, it has emerged as a global challenge for all the countries of the world. As stated above, the pollution of air, water and soil caused by emission of harmful gases, release of industrial effluents, urban wastes and radio-active wastes and reckless use of fertilizers and pesticides is threatening the very survival of modern civilization. If you go through the facts stated in the following box, you may realize the seriousness of environmental degradation. One of the major causes of environmental degradation is generation of solid wastes. Do you know that, all over the world people throw away 1000 million tons of solid wastes annually? If we pile up all these at sea level in the shape of a cone, a pyramid with circular base of one kilometer region, its peak would be higher than Mount Everest. So we are creating at least one Mount Everest of rubbish materials every year. We can save our environment from degradation and at the same time create wealth in three ways: Recycling, Reusing and Reducing, as detailed in the box below:

(i) Recycle What We Can, Whenever We Can: Recycling is the best way to slow down

environmental degradation, and is something that everyone should partake in. If we want

Recycle		Reuse		Reduce consumption	
What to Recycle	Its Impact	What to Reuse	How	What to Reduce	How
Organic waste such as banana peels, egg shells and leftovers of vegetables	It will enrich soil	Cans/ Tins	Use as Pencil Holder	Plastic	Use cloth bag for shopping and say no to plastic bags
Paper	Trees will be saved from being cut It will	Paper	Make rough pads out of remaining unused paper	Electricity	Switch off lights and fans when you leave a room
Aluminum	Reduce need for more bauxite	Cloth	Use as Carpet Sheets	Water	Close taps when water is not being used and store only the needed amount of water

to save the planet and take on this mission together, recycling the best way to fight environmental degradation together.

(ii) Reuse All the Resources and Materials that We Possibly Can: Second-hand consumption is definitely looked down upon, probably because we know that for what we use, we'll have more eventually. However, this will not be the case forever. Once something runs out, we will never be able to get that resource back. If people start reusing specific things, environmental degradation will be greatly reduced. We all must remember that we do not use the things that were once used before us, which is a scary thought in itself.

(iii) Reduce our Over All Consumption of Resources: Our natural resources that the planet gives us are limited, but many people seem to forget that. If we cut down our consumption by at least 70%, think of how much we could save. This includes cutting down trees to make paper and other materials that we need, as well as fossil fuels, such as oil, to fuel our cars and keep our industries moving. There are many companies who have already made the switch to go green for the purpose of

cutting down their over all resource consumption, such as power, which every company should consider doing. Our wildlife and flora rely on their natural environment, and if we keep tearing it down to serve our needs, we will have nothing left.

(iv) Green Transportation: If we all road bikes instead of driving cars, we could combat pollution quite easily. Cars and other vehicles release pollution into the air, which only causes the slow, deadly process of environment degradation to speed up, and cut our time on this planet even shorter. Not only would the air be so much cleaner if we all chose green transportation, such as bike riding to get to where we all need to go throughout the day, but over time we would all be in better shape. Meeting the needs of everyone, especially our planet, when it comes to green transportation is so important, and among one of the best ways to combat environments degradation.

(v) Give Back to the Environment: The best possible way to help prevent environmental degradation is to give back to the environment. You can do this successfully by planting three trees for every one that is cut down for the forestry industry. When it comes to the planet's trees, you can never have enough. Trees give us clean air to breathe; they literally filter out the bad and pump out the good, which is why we'd never survive without them. Keeping our forests alive are not only important to our ecosystem, but to the wildlife system of the world as well, because it's their home. When the food chain is affected, we as humans are all affected.

Check Your Progress-2

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. Radiation pollution is a form of ionizing or non-ionizing radiation that results from human activity. (True/False)

2. Rapid population growth puts strain on natural resources which results in degradation of our environment. (True/False)
3. Deforestation is done to enhance greenary. (True/False)
4. Ozone layer is responsible for protecting earth from harmful ultraviolet rays. (True/False)
5. Landslides, Avalanche, Drought, Wildfires, Flood, Tsunami, Volcanic eruption, Tornadoes, Earthquakes are natural disasters. (True/False)

11.5 DISASTERS AND PREPAREDNESS

A disaster is a sudden, calamitous event that seriously disrupts the functioning of a community

or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources. Though often caused by nature, disasters can have human origins. In contemporary academia, disasters are seen as the consequence of inappropriately managed risk. These risks are the product of a combination of both hazards and vulnerability. Hazards that strike in areas with low vulnerability will never become disasters, as in the case of uninhabited regions. Developing countries suffer the greatest costs when a disaster hits - more than 95 percent of all deaths caused by hazards occur in developing countries, and losses due to natural hazards are 20 times greater (as a percentage of GDP) in developing countries than in industrialized countries. Quarentelly (1985) disaster is a crisis situation that far exceeds the capabilities. Disaster' is defined as a crisis situation causing widespread damage which far exceeds our ability to recover. Thus, by definition, there cannot be a perfect ideal system that prevents damage, because then it would not be a disaster. It has to suffocate our ability to recover. Only then it can be called as 'disaster'.

11.5.1 Types of Disasters:

The earth's weather is very mysterious. One day it is sunny the next it is raining. In fact, sometimes as you are driving down the road, you hit the "wall" between a sunny day and a sever thunderstorm. Man has spent years trying to predict weather patterns but it is still an inexact science. This is a list of the most common occurring disasters of nature

(i) Landslides: A landslide is a disaster involving elements of the ground, including rocks, trees, parts of houses, and anything else which may happen to be swept up. Landslides can be caused by an earthquake, volcanic eruptions, or general instability in the surrounding land. Mudslides or mud flows area special case of landslides, in which heavy rainfall causes loose soil on steep terrain to collapse and slide downwards.

(ii) Avalanche: An avalanche is a geophysical hazard involving a slide of a large snow or rock mass down a mountainside, caused when a buildup of material is released down a slope, it is one of the major dangers faced in the mountains in winter. As avalanches move down the slope they may entrain snow from the snowpack and grow in size. The snow may also mix with the air and form a powder cloud. An avalanche with a powder cloud is known as a powder snow avalanche. The powder cloud is a turbulent suspension of snow particles that flows as a gravity current.

(iii) Drought: A drought is an extended period of months or years when a region suffers a severe deficiency in its water supply. Generally, this occurs when a region receives consistently below average rainfall. It can have a substantial impact on the ecosystem and agriculture of the affected

region. Although droughts can persist for several years, even a short, intense drought can cause significant damage and harm the local economy.

(iv) Wildfires: Wildfires, or forest fires, are uncontrolled fires burning in wild land areas. Common causes include lightning, human carelessness, arson, volcano eruption, and pyroclastic cloud from active volcano. The can be a threat to those in rural areas and also to wildlife. Wildfires can also produce ember attacks, where floating embers set fire to buildings at a distance from the fire itself.

(v) Flood: A flood is an overflow of an expanse of water that submerges land, a deluge. It is usually due to the volume of water within a body of water, such as a river or lake, exceeding the total capacity of the body, and as a result some of the water flows or sits outside of the normal perimeter of the body. It can also occur in rivers, when the strength of the river is so high it flows right out of the river channel, usually at corners or meanders.

(vi) Tsunami: A tsunami is a series of waves created when a body of water, such as an ocean, is rapidly displaced. Earthquakes, mass movements above or below water, volcanic eruptions and other underwater explosions, landslides, large meteorite impacts comet impacts and testing with nuclear weapons at sea all have the potential to generate a tsunami.

A tsunami is not the same thing as a tidal wave, which will generally have a far less damaging effect than a Tsunami.

(vii) Volcanic Eruption: A volcanic eruption is the point in which a volcano is active and releases lava and poisonous gasses into the air. They range from daily small eruptions to extremely infrequent super volcano eruptions (where the volcano expels at least 1,000 cubic kilometers of material). Some eruptions form pyroclastic flows, which are high- temperature eclouds of as hand steam that can travel down mountain sides at speeds exceeding that of an airliner.

(viii) Tornadoes: Tornadoes are violent, rotating columns of air which can blow at speeds between 50 and 300 mph, and possibly higher. Tornadoes can occur one at a time, or can occur in large tornado outbreaks along squall lines or in other large areas of thunderstorm development. Waterspouts are tornadoes occurring over water in light rain conditions.

(ix) Earthquake: An earthquake is the result of a sudden release of energy in the Earth's crust that creates seismic waves. Earthquakes are recorded with a seismometer, also known as a seismograph. The magnitude of an earthquake is conventionally reported on the Richter scale, with magnitude 3 or lower earthquakes being mostly imperceptible and magnitude 7 causing serious damage over large areas. Intensity of shaking is measured on the modified Mercalli scale. At the Earth's surface, earthquakes manifest themselves by shaking and sometimes displacement of the

ground.

(x) Hurricanes: Hurricanes, tropical cyclones, and typhoons are different names for the same phenomenon: a cyclonic storm system that forms over the oceans. It is caused by evaporated water that comes off of the ocean and becomes a storm. The Carioles Effect causes the storms to spin, and a hurricane is declared when this spinning mass of storms attains a wind speed greater than 74 mph. Hurricane is used for these phenomena in the Atlantic and eastern Pacific Oceans, tropical cyclone in the Indian, and typhoon in the western Pacific.

11.5.2 Effects of Disasters

Natural disasters - such as hurricanes, cyclones, earthquakes, mudslides, floods, wildfires, volcanic eruptions and weather events like extreme droughts and monsoons - are likely increasing in frequency due to climate change. These events bring with them a host of issues, including humanitarian, public health, environmental and infrastructural problems.

(i) Humanitarian Crises: Climate change and accompanying natural disasters have created a large migrant population, called climate refugees or environmental migrants. These people can be been forced out of their homes by an abrupt natural disaster, like a tsunami, or a slower-moving natural disaster, like a relentless drought. In any case, the area where they formerly lived is no longer habitable for one reason or another or the standard of living has dropped so drastically that the uncertain future of migration looks more promising. It is predicted that by the end of the century there will be 2 billion climate refugees and environmental migrants. Out of a projected population of 11 billion by 2100, that is almost 1/5 of the people on earth. Most of these people will have lived along the coastlines.

(ii) Public Health Issues: Health issues are one of the most pressing problems after any natural disaster. It is often the case that facilities for water and toilet hygiene are damaged or inoperable: meaning that the safe disposal of human waste quickly becomes a public health hazard. Further, without running water, hand washing and food hygiene rapidly deteriorate. During and after events like hurricanes and floods, standing water can be a breeding ground for pathogenic bacteria and disease vectors like mosquitoes. In cases where transportation capabilities and infrastructure are damaged, survivors of natural disasters can be cut off from life-saving medications for both acute and chronic conditions, and be isolated from rescue and emergency healthcare services. After a natural disaster event, survivors can experience mental health consequences, including post-traumatic stress disorder, or PTSD.

(iii) Environmental Problems: In March 2011, a tsunami following the 9.0-magnitudeT?hokuearthquake in Japan caused what came to be known as the Fukushima Daiichi nuclear disaster, where radioactive material was released in Japan and into the Pacific Ocean. This was the largest nuclear disaster since Chernobyl, and it caused a cascade of issues in the ecosystem and surrounding waters, spreading radioactive material through far-ranging ocean currents. Natural disasters, from tsunamis to wildfires, can cause wide-ranging andlong-term consequences for ecosystems: releasing pollution and waste, or simply demolishing habitats.

(iv) Infrastructural Damage: One of the most immediate and economically devastating concerns with natural disasters is the damage to both public and private infrastructure. These events can cause billions of dollars in damages, and not all governments are equipped to fund the process of post-disaster cleanup and rebuilding.

Further, many private homeowners do not have property insurance, and certain natural disasters fall outside of the scope of insurance coverage; this means that in the wake of a disaster, people can end up losing all of their assets with no opportunity for restitution. Natural disasters can have long-term negative consequences beyond the immediate loss of life and demolition of infrastructure. Often, an area impacted by a natural disaster will show scars of the event for years to come.

11.5.3 Disaster Management Cycle

Disaster management cycle includes the following stages/ phases

- Disaster Phase - The phase during which the event of the disaster takes place. This phase is characterized by profound damage to the human society. This damage / loss may be that of human life, loss of property, loss of environment, loss of health or anything else. In this phase, the population is taken by profound shock.
- Response Phase - This is the period that immediately follows the occurrence of the disaster. In a way, all individuals respond to the disaster, but in their own ways.
- Recovery Phase - When the immediate needs of the population are met, when all medical help has arrived and people have settled from the hustle - bustle of the event, they begin to enter the next phase, the recovery phase which is the most significant, in terms of long term outcome. It is during this time that the victims actually realize the impact of disaster. It is now that they perceive the meaning of the loss that they have suffered.
- Risk Reduction Phase - During this phase, the population has returned to predisaster

standards of living. But, they recognize the need for certain measures which may be needed to reduce the extent or impact of damage during the next similar disaster. For example, after an earthquake which caused a lot of damages to improperly built houses, the population begins to rebuild stronger houses and buildings that give away less easily to earthquakes. Or, in the case of tsunami, to avoid housings very close to the shore and the development of a 'green belt'- a thick stretch of trees adjacent to the coast line in order to reduce the impact of the tsunami waves on the land. This process of making the impact less severe is called Mitigation.

- Preparedness Phase - This phase involves the development of awareness among the population on the general aspects of disaster and on how to behave in the face of a future disaster. This include seducation on warning signs of disasters, methods of safe and successful evacuation and first aid measures. It is worth to note that the time period for each phase may depend on the type and severity of the disaster.

11.5.4 Disaster Preparedness

Disaster preparedness refers to measures taken to prepare for and reduce the effects of disasters. That is, to predict and, where possible, prevent disasters, mitigate their impact on vulnerable populations, and respond to and effectively cope with their consequences. Disaster preparedness provides a platform to design effective, realistic and coordinated planning, reduces duplication of efforts and increase the overall effectiveness of National Societies, household andcommunitymembers disaster preparedness sand response efforts. Disaster preparedness activities embedded with risk reduction measures can prevent disaster situations and alsoresultin saving maximum live sand livelihoods during any disaster situation, enabling the affected population to get back to normalcy within a short time period.

Disaster preparedness is a continuous and integrated process resulting from a wide range of risk reduction activities and resources rather than from a distinct sector al activity by itself. It requires the contributions of many different areas, ranging from training and logistics, to healthcare, recovery, livelihood to institutional development. In the preparedness phase, emergency managers develop plans of action for when the disaster strikes. Commonpreparedness measures include the

- communicationplanswitheasilyunderstandableterminologyandchainofcommand
- development and practice of multi-agency coordination and incident command
- proper maintenance and training of emergency services
- development and exercise of emergency population warning methods combined with

emergency shelters and evacuation plans

- stockpiling, inventory, and maintenance of supplies and equipment

An efficient preparedness measure is an Emergency Operations Center (EOC) combined with a practiced region-wide doctrine for managing emergencies. Another preparedness measure is to develop a volunteer response capability among civilian populations. Since, volunteer response is not as predictable and plan able as professional response; volunteers are most effectively deployed on the periphery of an emergency.

Check Your Progress-3

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. Hurricanes, cyclones, earthquakes, are type of _____
2. Climate change and natural disasters led to the problem of _____.
3. _____ are one of the major problem after any natural disaster.
4. _____ is the result of sudden release of energy in the earth's crust that creates seismic waves.
5. Avalance, landslides, drought, wildfires, flood are type of _____.

11.6 INTERDEPENDENCE AND INTERACTION ACROSS SPACE

Interdependence has long been deemed the key feature of work performed by teams. Interdependence is broadly defined as "the extent to which the organization's task requiresits members to work with one another. Commonly, tasks characterized by higher levels of technological interdependence (i.e., interdependence inherent in the actual process of transforming inputs to output; are treated more like "teamwork" and less like individual work. At least three other forms of interdependence are also important in team settings. Goal interdependence and feedback interdependence refer to the interconnections among group members as they pursue group rather than individual goals, and the degree to whichthe group receives feedback which reflects its performance as a whole.

What makes specific combinations of behavior on the part of persons A and B pleasurable versus painful? Interdependence theory does not identify an overarching need or drive that fuels interpersonal behavior (e.g., reproduction, security, mastery). Instead, it is assumed that humans have diverse instrumental and social-emotional needs, that some are biologically based whereas others are learned, that needs cover a spectrum from survival to spirituality, and that some needs are pervasive whereas others are unique to specific situations and partners. Many needs are inherently

interpersonal and can be gratified only in the context of dyads or groups (e.g., belonging, sexuality, security). Interactions are experienced as pleasurable to the extent that they gratify one or more important needs and are experienced as unpleasant or painful to the extent that they fail to gratify or are antithetical to important needs. Interaction frequently yields not only concrete outcomes,or direct experiences of pleasure versus displeasure, but also symbolic outcomes, or experiences that rest on the broader implications of interaction.

11.7 MIGRATION OF PEOPLE

Migration denotes any movement by human beings from one locality to another, often over long distances or in large groups. Humans are known to have migrated extensively throughout prehistory and human history. The movement of populations in modern times has continued under the form of both voluntary migration within one's region, country, or beyond, and involuntary migration (which includes trafficking in human beings and ethnic cleansing). The people who migrate are called migrants, or, more specifically, emigrants, immigrants, or settlers, depending on historical setting, circumstance, and perspective. Human migrations, initiated for whatever reason, have affected the grande pochs in history, changing forever the demographic landscape of lands throughout the world, bringing, on some occasions, innovation and mutual benefits, and on others destruction and suffering. While social scientists and historians look for external causes for these happenings, including climate change and political or religious oppression, religious scholars and people of faith regard many such events as the playing out of God's providence, bringing humankind ever closer to a time when human beings fill the earth and live as one family in peace and harmony. Human migration is the movement by people from one place to another with the intentions of settling, permanently or temporarily in a new location. The movement is oftenover long distances and from one country to another, but internal migration is also possible; indeed, this is the dominant form globally. People may migrate as individuals, in family units or in large groups. A person who moves from their home to another place because of natural disaster or civil disturbance maybe described as a refugee or, especially within the same country, a displaced person. A person seeking refuge from political, religious or other forms of persecution is usually described as an asylum seeker.

Donald, I. B. "Migration among human beings in contrast to migration among animals, that, it is a response of human organisms to economic, social and demographic forces in the environment". United Nation Multilingual Demographic Dictionary, "Migration is a form of geographical mobility or special mobility between one geographical unit and another or a change in residence from the place of origin or the place of departure to the place of destination or place of arrival".

11.7.1 Types of Migration

- Immigration and Emigration: When people from one country move permanently to another country, for example, if people from India move to America then for America, it is termed as Immigration, whereas for India it is termed as Emigration.
- In-migration and Out-migration: In-migration means migration occurring within an area only, while out-migration means migration out of the area. Both types of migration are called internal migration occurring within the country. Migration from Bihar to Bengal is in-migration for Bengal, while it is out-migration for Bihar.
- Gross and Net Migration: During any time period, the total number of persons coming in the country and the total number of people going out of the country for residing is called gross migration. The difference between the total number of persons coming to reside in a country and going out of the country for residing during any time period is termed as net migration.
- Internal Migration and External Migration: Internal migration means the movement of people in different states and regions within a country from one place to another. On the other hand, external or international migration refers to the movement of people from one country to another for permanent settlement.
- Step Migration: It involves series of short and less extreme movements from the place of origin to the destination.
- Return Migration: It is the voluntary movement of the immigrants to the place of origin.
- Seasonal Migration: It is the movement for a specific period of time in response to the climate conditions or labor conditions.
- Chain Migration: It is the type of movement which begins from one member of the family who arranges money for his family members in order to make them move to a new location.

11.7.2 Causes of Migration of people

People have moved from their home countries for centuries, for all sorts of reasons. Some are drawn to new places by' pull factors, others find it difficult to remain where they are and migrate because of 'push' factors. These have contributed to the recent movement of people here but are also the reason why people from here have emigrated to other countries. Over 80 million people in the world have Irish blood; 36.5 million US residents claimed Irish ancestry in 2007. Historically some were transported or sold into slavery or left because of poverty, hunger, persecution, discrimination, civil war, unemployment and, more recently, simply for education and better jobs. Migrant numbers

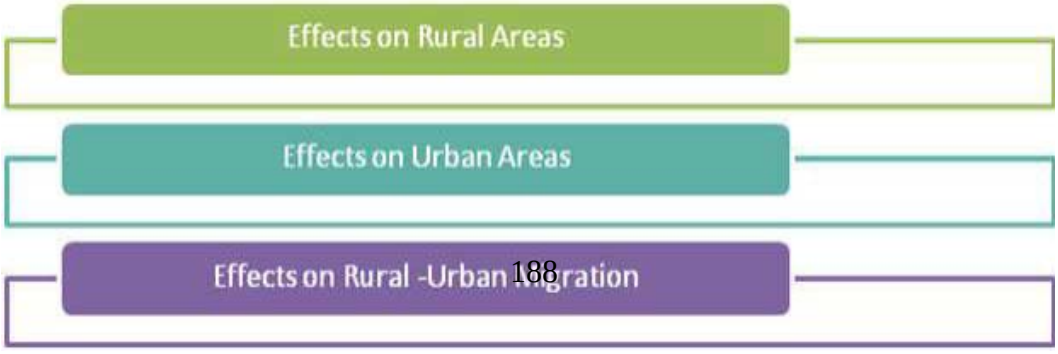
have risen rapidly in the last decade. In 2013 there were thought to be over 230 million international migrants. The causes of migration can be seen as a series of push and pull factors-those factors which either forcefully push someone into migration or attract them. Push and pull factors are usually considered as north and south poles on a magnet. Push factors: A push factoris a forceful factor, and a factor which relates to the country the person is migrating from. It is generally a problem which results in people wanting to leave. Pull factors: A pull factor is something concerning the country a person migrates to. It is generally a good thing that attracts people to a certain place.

Push factors Pull factors

Push factors	Pull factors
• Not enough jobs • Few opportunities • Inadequate conditions • Desertification • Famine or drought • Political fear or persecution • Slavery or forced labor • Poor medical care • Loss of wealth • Natural disasters • Death threats	• Job opportunities • Better living conditions • The feeling of having more political or religious freedom • Enjoyment • Education • Better medical care • Attractive climates • Security • Family links • Industry
• Desire for more political or religious freedom • Pollution • Poor housing • Landlord/tenant issues • Bullying • Mentality • Discrimination • Poor chances of marrying • Condemned housing (radon gas, etc.) • War	• Better chances of marrying

11.7.3 Effects of Migration

Internal migration affects the place where from people migrate and the place to which they migrate. When the migrants move from rural to urban areas, they have both



positive and negative effects on the society and economy.

(i) Effects on Rural Areas: Migration affects rural areas (the place of origin) in the following ways:

(a) Economic Effects: When population migrates from rural areas, it reduces the pressure of population on land, the per worker output and productivity on land increases and so does per capita income. Thus family income rises which encourages farmers to adopt better means of production there by increasing farm produce. Those who migrate to urban areas are mostly in the age group of 18-40 years. They live alone, work and earn and remit their savings to their homes at villages. Such remittances further increase rural incomes which are utilized to make improvements on farms which further raise their incomes. This particularly happens in the case of emigrants to foreign countries who remit large sums at home. Moreover, when these migrants return to their villages occasionally, they try to raisethe consumption and living standards by bringing new ideas and goods to their homes. Modern household gadgets and other products like TV, fridge, motor cycles, etc. have entered in the majority of rural areas of India where larger remittances flow from urban areas.

Further, with the migration of working age persons to urban areas the number of farm workers is reduced. This leads to employment of under employed family members onthe farm such as women, older persons and even juveniles. Further, out-migration widens inequalities of income and wealth in rural area families which receive large remittances andtheir incomes rise. They make improvements on their farms which raise productivity and production. These further increase their incomes. Some even buy other farm lands. Thus such families become richer as compared to others, there by widening inequalities.

(b) Demographic Effects: Migration reduces population growth in rural areas. Separation from wives for long periods and the use of contraceptives help control population growth. When very young males migrate to urban areas, they are so influenced by the urban life that they do not like to marry at an early age. Their aim is to earn more, settle in any vocation or job and then marry. Living in urban areas makes the migrants health conscious. Consequently, they emphasize on the importance of health care, and cleanliness which reduces fertility and mortality rates.

(c) Social Effects: Migration also affects the social set-up of rural communities. It weakens the joint family system if the migrants settle permanently in urbanareas. Within termingling of the migrants with

people of different castes and regions in cities, they bring new values and attitudes which gradually change old values and customs of realties. Women play a greater role in the social setup of the rural life with men having migrated to towns.

(ii) Effects on Urban Areas: Migration affects urban areas (or the place of destination) in the following ways:

(a) Demographic Effects: Migration increases the population of the working class in urban areas. But the majority of migrants are young men between the ages of 15 to 24 years who are unwed. Others above this age group come alone leaving their families at home. This tendency keeps fertility at a lower level than in rural areas. Even those who settle permanently with their spouses favour small number of children due to high costs of rearing them. Theother factor responsible for low fertility rate is the availability of better medical and family planning facilities in urban areas.

(b) Economic Effects: The effects of migration on income and employment in urban areas are varied depending upon the type of migrants. Usually the migrants are unskilled and find jobs of street hawkers, shoeshine boys, carpenters, masons, tailors, rickshaw pullers, cooks and other tradesmen, etc. These are "informal sector" activities which are low paying.But, according to the ILO, the evidence suggests that the bulk of employment in the informal sectoris economically efficient and profit-making. Thus such migrants earn enough to spend and remit to their homes. Other migrants who are educated up to the secondary level find jobs as shop helpers, assistants, taxi drivers, repairing machines and consumer durables, marketing goods and in other informal activities that are small in scale, labour intensive and unregulated. Their earnings are sufficient to bring them in the category of a common urbanite with an income level higher than the unskilled workers. Another class ofmigrants that is very small is of those who come for higher education in colleges and institutes to towns. They find goodjob in the "formal sector", get good salaries, and follow a good standard of living. These are the persons who remit large sums to their homes and help in modernizing the rural scenario.

(iii) Adverse Effects of Rural-Urban Migration: Migration from rural to urban areas has a number of adverse effects. Towns and cities, in which the migrants settle, face innumerable problems. There is the prolific growth of huge slums and shantytowns. These settlements and huge neighborhoods' have no access to municipal services such as clean and running water, public services, electricity, and sewage system. There is acute housing shortage. The city transport system is unable the meet the demand of the growing population. There are air and noise pollutions, and increased crime and congestion. The costs of providing facilities are too high to be met, despite the best intentions of the local bodies. Besides, there is massive underemployment and unemployment in towns and cities. Men and women are

found selling bananas, groundnuts, balloons and other cheap products on pavements and in streets. Many work as shoeshine's, parking helpers, porters, etc. Thus, urban migration increases the growth rate of job seekers relative to its population growth, thereby raising urban supply of labour. On the demand side, there are no enough jobs available for the ruralities in the formal urban sector for the uneducated and unskilled rural migrants.

Consequently, this rapid increase in labour supply and the lack of demand for such labour lead to chronic and increasing urban unemployment and underemployment.

11.8 TRANSPORT AND COMMUNICATION

Transportation and communication are means or processes of overcoming distance. Transportation usually involves carrying or moving of goods and people from place to place, while communication involves the passing of news and information from one person to another. Transportation involves such modes as roads, water, air and pipelines, while communication involves the use of telephone, telegraphs, email, fax, newspapers, radio, television etc. Transport and communication are both substitute and complements; it might be possible that sufficiently advance communication could be substituted fo rtransportation. For instance, one could telegraph, telephone fax or mail a customer or a friend rather than paying a personal visit. It has been established that these modes of communication generates more total interactions including inter-personal interaction. Long before now, Communication was solely dependent on transportation as, in the absence of electronic communications; it depended on the speed and efficiency of transportation. Messages either orally or written were delivered from one place to another only by travelling and most people traveled in the same vehicles as passengers and merchandise. Communications were also tied to the speed of horse, oxen, barge, or a man on foot. However today, the growth of transportation may not still be possible without communication which is vital for advance transportation system. For instance, railway roads which want to run train in two directions on a signal track, air traffic control which requires the knowledge of air craft in the sky. Thus, it has been found that the increase of one generally leads to more of the other.

11.8.1 Transport

Transport (British English) or transportation (American English) is the movement of people and goods from one place to another. The term is derived from the Latin trans ("across") and portage ("to carry"). Transportation means the movement of people and goods from one place (location) to another. This movement can be through roads, railways, water air, and pipelines. An efficient transportation system is in many ways the livelihood of an economic system because it is the means

where by the friction of space is overcome. The need to move goods and people from place to place is imperative and this has made possible the changes in transportation technology in order to improve the efficiency of movements. The effects of transportation improvement are seen in the progressive alternation of spatial dimensions, which have resulted in the shrinkage of the world. The shrinkage is however not the same everywhere. The transportation revolution has led to an increase in speed of movement and thus reduces the time distance separating places. The major development in transportation industry has also reduced transportation cost and as the result of the positive changes in transportation, overall spatial economic system has undergone a degree of spatial reorganization which are as following:

- The spatial pattern of production has been transformed from a disperse to concentrated pattern.
- There has been an increased differentiation between locations on the basis of their intrinsic qualities.
- The degree of geographic specialization and spatial extent of production have both increased.

1. Functions of Transport : Following are the functions of transportation:

- Transport contributes in Growth of industries whose product requires quick marketing. Perishable articles like fish and green vegetables are carried to various consumers quickly even in distant markets through transport.
- Transport helps in increase in the demand for goods. Through transport newer customers in newer places can be easily contacted and products can be introduced to them. Today markets have become national or international only because of transport.
- Transport creates place utility. Geographical and climatic factors force industries to be located in particular places far away from the markets and places where there may not be any demand for the products. Transport bridges the gap between production and consumption centers.
- Transport creates time utility. Transport has started creating the time utility also. It has been made possible by virtue of the improvements in the speed of transport. It helps the product to be distributed in the minimum possible time.
- Transport helps in stabilization of price. Transport exerts considerable influence upon the stabilization of the prices of several commodities by moving commodities from surplus to deficit areas. This equalizes the supply and demand factor sand makes the price of commodities stable as well as equal.

- Transport ensures even flow of commodities into the hands of the consumers through out the period of consumption.
- Transport enables the consumers to enjoy the benefits of goods not produced locally. This increases the standard of living, an essential factor for further development of marketing andeconomy.
- Transport identifies competition, which in turn, reduces prices. Prices are also reduced because of the facilities offered by transport for large-scale production. Advantages of large-scale production are possible only due to transport.
- Transport increases mobility of labor and capital. It makes people of one place migrate to other places in search of jobs. Even capital, machineries and equipments are imported from foreign countries through transport alone.

2. Means of Transport : The means of transport are classified on the basis of the way, the vehicle, the motive power used and terminals.

- Land Transport: Land Transport may be classified as-

(a) Pathways: In remote villages, forest and hilly areas pathways are still an important amongst the different modes of transport. It further be subdivided into Head loads (is also known as human transport. It is used in the hilly areas where even animals cannot reach) and Pack animals (is also known as animal transport. It is used in the backward areas. The animals like horse, pony, donkey, ass, buffaloes, camel, elephant, yak, sheep etc. are used for this purpose.

(b) Roadways: Road Transport is one of the most important modes of transport. The history of Road Transport started from ancient civilizations. Gradually it becomes more and more popular means of transport. Road Transport further subdivided into Vehicular Transport (Cars, Trucks, Buses, Lorries, Autoricksaws, Bullock Carts, Tongas, Tumtums, and Hand Carts etc.) and Non-vehicular Transport (Hamals, Animals like Camel, Dogs, Elephant, Horse, Mules etc.)

Tramways: Tramway is one of the cheaper, longer, quicker and safer modes of Land Transport which is suitable in large cities. However due to certain limitations like slowly-ness, huge investment, inflexibility etc. gradually it replaced by other means of Land Transport.

(c) Railways: Railway has been the pioneer of modern mechanical transport. It has brought the greatest revolution in transport. It accelerated commercial and industrial developmentof various countries. Until the introduction of Motor Transport, Railway had the monopoly as the Land Transport. In India, it is the principal means of transport. It carries over 80 per cent of goods traffic and over 70 per cent of passenger traffic. It provides for more than 60000 kilometers of railways all over the country.

• Water Transport: Water transport is the cheapest and the oldest form of transport for heavygoods and bulk cargoes. Waterways are the natural gifts, hence it does not required large amount of capital expenditure for the construction of road and railway tracks, except canal transport, as in the case of land transport. In addition to that the cost of running is also very less. Water transport may be classified as under:

(a) Inland Waterways: Inland waterways may be subdivided into two parts-

(b) River Transport: Rivers are the water highways given by nature. River Transport is suitable for small boats and steamers. It was highly developed in the pre-railway days. But with the development of railways, river transport was neglected and decayed gradually.

(c) Canal Transport: Canals are the artificial waterways constructed for the purpose of navigation and irrigation.

(d) Ocean Transport: Ocean Transport or shipping may be subdivided into

(e) Coastal Shipping: Coastal shipping is a cheaper, speedy, flexible and economical form of transport for the movement of bulky and heavy cargoes. Usually coastal shipping trade is reserved for the national shipping. In India also from 1951 and onwards the coastal shipping trade is extremely reserved for the national ships.

(f) Overseas Shipping: On the basis of their working, overseas shipping maybe divided into The Liner (those ships which follow defined routes with fixed places and fixed time table), The Tramps (those ships which have no set routes or fixed time table) and The Oil Tanker (special sea carriers of crude oil in very large quantity). The Liners may again be subdivided into Passenger Liners and the Cargo Liners.

• Air Transport: Air transport is the gift of twentieth century to the world. It is the latest means of transport. The first flight in the air was made in 1903, only for twelve seconds. Successfully it was used as a means of transport after the First World War (1914-1918). The first air service was started in 1919 between London and Paris. Since then it has made notable progress and provide tough competition to Railways. Air Transportcan again be subdivided into passenger and cargo.

3. Role of Transportation in Society : Transportation is a non separable part of any society. It exhibits a very close relation to the style of life, the range and location of activitiesand the goods and services which will be available for consumption. Advances in transportation has made possible changes in the way of living and the way in which societies are organized and therefore have a great influence in the development of civilizations. This chapter conveys understanding of the importance

of transportation in the moderns society by presenting selected characteristics of existing transportation systems, their use and relationships to other human activities. Transportation is responsible for the developmentof civilizations from very old times by meeting travel requirement of people and transport requirement of goods. Such movement has changed the way people live and travel. In developed and developing nations, a large fraction of people travel daily for work, shopping and social reasons. But transport also consumes a lot of resources like time, fuel, materials and land.

4. Economic Role of Transportation: Economics involves production, distribution and consumption of goods and services. People depend upon the natural resources to satisfy the needs of life but due to non uniform surface of earth and due to difference in local resources, there is a lot of difference in standard of living in different societies. So there isan immense requirement of transport of resources from one particular society to other. These resources can range from material things to knowledge and skills like movement of doctors and technicians to the places where there is need of them.

- The place, time, quality and utility of goods: An example is given to evaluate the relationship between place, time and cost of a particular commodity. If a commodity is produced at point A and wanted by people of another community at any point B distant x from A, then the price of the commodity is dependent on the distance between two centers and the system of transportation between wopoints. With improved system the commoditywill be made less costly at B.

- Changes in location of activities: The reduction of cost of transport does not have same effect on all locations. Let at any point B the commodity is to be consumed. This product is supplied by two stations Aand K which are at two different distances from B. Let at present the commodityis supplied byAsince it is at a lesser distance but after wards due to improvement in road network between B and K, the point K becomes the supply point ofproduct.

5. Social Role of Transportation: Transportation has always played an important role in influencing the formation of urban societies. Although other facilities like availability of food and water played a major role, the contribution of transportation can be seen clearly from the formation, size and pattern, and the development of societies, especially urban centers.

- Formation of settlements: From the beginning of civilization, the man is living in settlements which existed near banks of major river junctions, a port, or an intersection of trade routes. Cities like New York, Mumbai and Moscow are good examples.

- Size and pattern of settlements: The initial settlements were relatively small developments but with due course of time, they grew in population and developed into big cities and major trade centers. The size of settlements is not only limited by the size of the area by which the settlement can

obtain food and other necessities, but also by considerations of personal travels especially the journey to and from work. The increased speed of transport and reduction in the cost of transport has resulted in variety of spatial patterns.

- Growth of urban centers: When the cities grow beyond normal walking distance, then transportation technology plays a role in the formation of the city. For example, manycities in the plains developed as a circular city with radial routes, where as the cities beside a river developed linearly. The development of automobiles and other factors like increasein personal income, and construction of paved road network, the settlements were transformed into urban centers of intense travel activity.

6. Political Role of Transportation: The world is divided into numerous political units which are formed formutual protection, economic advantages and development of common culture. Transportation plays an important role in the functioning of such political units.

Administration of an area: The government of an area must be able to send/get information to/about its people. It may include laws to be followed, security and other needful informationneeded to generate awareness.An efficient administration ofa country largely depends on how effectively government could communicate these information to all the country. However, with the advent of communications, its importance is slightly reduced.

- Political choices in transport: These choices maybe classified as communication, military movement, travel of persons and movement of freight. The primary function of transportation is the transfer of messages and information. It is also needed for rapid movement of troops in case of emergency and finally movement of persons and goods. The political decision of construction and maintenance of roads has resulted in the development of transportation system.

7. Environmental Role of Transportation: The negative effect of transportation is more dominating than its useful aspects as faras transportation is concerned. There are numerouscategories intowhich the environmental effects have been categorized. They are explainedin the following sections.

- Safety: Growth of transportation has a very unfortunate impact on the society in terms of accidents. Worldwide death and injuries from road accidents have reached epidemic proportions. - killed and about 15 million injured on the road accidents annually. Increased variation in the speed sand vehicle density resulted in a high exposure to accidents. Accidentsresult in loss of life and permanent disability, injury, and damage to property. Accidents also cause numerous non-quantifiable impacts like loss of time, grief to the near ones of the victim, and inconvenience to the public. The loss of life and damage from natural disasters, industrial accidents, or epidemic often receive significant attention from both government and public. This is because their occurrence is concentrated but

sparse. On the other hand, accidents from transport sector are widespread and occur with high frequency. For instance, a study has predicted that death and disabilities resulting from road accidents in comparison with other diseases will rise from ninth to third rank between 1990 and 2020. Road accidents as cause to death and disability could rank below heart disease and clinical depression, and ahead of stroke and all infectious diseases. Significant reduction to accident rateis achieved in the developing countries by improved roade signed maintenance, improved vehicle design, driver education, and law enforcements. However in the developing nations, the rapid growth of personalized vehicles and poor infrastructure, road design, and law enforcement has resulted in growing accident rate.

- Air Pollution: All transport modes consume energy and the most common source of energy is from the burning of fossil fuels like coal, petrol, diesel, etc. The relation between air pollution and respiratory disease has been demonstrated by various studies and the detrimental effects on the planet earth are widely recognized recently. The combustion of the fuels releases several contaminants into the atmosphere, including carbon monoxide, hydrocarbons, oxides of nitrogen, and other particulate matter. Hydrocarbons are the result of incomplete combustion of fuels. Particulate matters are minute solid or liquid particles that are suspended in the atmosphere. They include aerosols, smoke, and dust particles. These air pollutants once emitted into the atmosphere, undergo mixing and disperse into the surroundings.
- Noise pollution: Sound is acoustical energy released into atmosphere by vibrating or moving bodies where as noise is unwanted sound produced. Transportation is a major contributor of noise pollution, especially in urban areas. Noise is generated during both construction and operation. During construction, operation of large equipments causes considerable noise to the neighborhood. During the operation, noise is generated by the engine and exhaust systems of vehicle, aerodynamic friction, and the interaction betweenthe vehicle and the support system (road tire, rail-wheel). Extended exposure to excessivesound has been shown to produce physical and psychological damage. Further, because of its annoyance and disturbance, noise adds to mental stress and fatigue.

- Energy consumption: The spectacular growth in industrial and economic growth during the past century has been closely related to an abundant supply of inexpensive energy from fossil fuels. Transportation sector is unbelieved to consume more than half of the petroleum products. The compact of the shortage of fuel was experienced during major wars when strict rationing was imposed in many countries. The impact of this had cascading effects on many factors of society, especially in the price escalation of essential commodities. However, this has few positive impacts; a shift to public transport system, a search for

energy efficient engines, and alternate fuels. During the time of fuel shortage, people shifted to cheaper public transport system. Policy makers and planners thereafter gave much emphasis to the public transit which consumes less energy per person. The second impact was in the development of fuel-efficient engines and devices and operational and maintenance practices. Afast depleting fossil fuel has accelerated the search for energy efficient and environment friendly alternate energy source. The research is active in the development of bio-fuels, hydrogen fuels and solar energy.

- Other impacts: Transportation directly or indirectly affects many other areas of society and few of them are listed below: Almost all cities uses 20-30 percent of its land in transport facilities. Increased travel requirement also require additional land for transport facilities. A good transportation system takes considerable amount of land from the society. Aesthetics of a region is also affected by transportation. Road networks in quite country side are visual intrusion. Similarly, the transportation facilities like fly-over are again visual intrusion in urban context. The social life and social pattern of a community is severely affected after the introduction of some transportation facilities. Construction of new transportation facilities often requires substantial relocation of residents and employment opportunities.

11.8.2 Communication

Communication is very necessary for human existence; it is a medium of sending and receiving information through various means. Communication is a very vital aspect of the society in which without it, it will be difficult for spatial interaction to take place and if our messages are not clearly delivered, we may not get what we need to survive. The needed thing could be information, money advice or just emotional support. Communication system helps industrialists and business communities to take right decisions at the right time by providing them information and news related with business and financial matter. Itis possible to know about the price of the commodity prevailingat any part of the world in no time and it also helps to operate their business according to that through communication system. However, communication system facilitates economic development by sending information to various locations. Communication brings about change and modernization in the outlook and life style of the people according to the changing conditions of the world.

1 Modes of Communication

(i) Means of Personal Communication: We classify means of personal communication into two parts:

- Postal Service: Postal service is a very old means of communication. Though letter writing is not that popular any longer, it is still important even today. Indian Postal Network is the largest in the world. In 2001, India had 1,55,000 post offices providing different services like - letters, money

orders, parcels, postal saving schemes, etc.

- Telephone Service: It has emerged as one of the most important and widely used means of communication in today's world. It is quick and affordable, serving our need seamlessly.

(ii) Means of Mass Communication: The means by which information can be communicated to a very large number of people are called Media or Mass Communication, such as radio, television, newspaper, cinema, books, magazines, traditional folk modes and satellite communication.

- Radio: Radio transmission in India started in 1927 from Mumbai and Kolkata to entertain, educate and apprise the people of the country with important information. Today the program of All India Radio (AIR) is available to 90% parts of the country to 98.8% of our people.

- Television: The national television transmission service of India started in 1959 is one of the biggest ground transmission organizations of the world. Today, 87% of population can watch it. Television program telecast by National, Regional and local Doordarshan and a large number of private channels are available for education, information and recreation.

- Computer (Information Technology): Today, computer has become the basis of communication and economic development as it is used everywhere from homes, offices to shops, hospitals, railways, airports, banks, educational institutions, etc.

(iii) Newer communication Technology: In recent years, there is revolution of new technology that has helped people in much better way such as:

- Internet: It provides access to several kinds of information. It connects all types of computers across the world to obtain information at the click of a button.

- Video Conferencing: People sitting at far off places can talk and express their views with the help of telecommunication and computer.

- E-Commerce: Facility available for sale and purchase of goods through internet and fax.

- Internet Telephony: It is a software programme which makes a computer to work like telephone. This facility has reduced the call rates drastically.

- E-Mail: It is a method of sending letters or information through internet to anyone in the world in the blink of an eye.

- Tele-Medicine: Using this technology, doctors can advise his patients sitting at a distance of thousands of kilometers from them. Thus, scientific advancement and technology has revolutionized the system of communication and brought people very close to each other, to be in touch all the time and making the world a global village.

11. 8.3 Importance of Transportation and Communication in Development

Importance of transportation and communication discussed in detail as below:

- Both transportation and communication play some major roles in the economic uplift of a country as they promote internal and external trade.
- Transportation and communication systems help to promote the use of natural resources, mobility of skilled labor-force, diversification of markets, provision of fuel, increase in agricultural and industrial production.
- Efficienttransportandcommunicationsystemshelptoestablishrelationshipsamong people in different parts of the world; these have also strengthened the feeling of unity among people in different cultural backgrounds.
- Transport and communication systems help to create job opportunity for people living in the rural areas by connecting laborers and creating employment for them in the industries; however these have also solved the needs of industries and reduceunemployment.
- The development of transport system also leads to development of industries because transport system utilizes the product of industries and both complement each other in different ways.
- Efficient means of transport and communication have indeed shortened time, distance, and cost that would have been used to move and to deliver goods and information from one person to another.
- Transportation and communication help to increase the size of the market of your

Products by helping you to transport your products across different countries which will help you to increase your sales in those countries that is, by penetrating new markets.

- Through the effective transport and communication systems one will know how to strategies in terms of war and also curtail crisis from taking place at any point in time.
- Government can swiftly evacuate or inform her people against any occurrence of natural disaster, outbreak of diseases and other social problems through the means of transportation and communicationsystem.
- The production and distribution units (farms, factories, central places) that are under primitive or high-cost transport conditions, had to be scattered to serve distant markets, have tended to become spatially concentrated in areas of greatest advantage. Market areas therefore have

become even more extensive as transportation has improved. Similarly, supply areas have expanded. For instance, agricultural production has become more profitable and so wider areas of production are opened up from the central markets.

- Transportation revolution has therefore significantly improved accessibility of places and therefore bringing more developments and growth. This is because transportation is the main vein through which developmental facilities and services are channeled. The level of transport development of many areas therefore positively correlated to the level of economic growth and development.
- Transportation plays a major role in the economy, which increases the production efficiency and links to the logistic systems.
- Transport extends the range of sources of supply of goods to be consumed in an area, making it possible for user to get resources at cheap price and high quality.
- Theuseofmoreefficientsystemsofsupplyresultsinanincreaseinthetotalamount of goods available for consumption.
- Since the supply of goods is no longer dependent on the type of mode, items can be supplied by some alternative resources if usual source cannot supply what is needed.

11.9 TRADE AND COMMERCE

The two terms "commerce" and "trade" are interrelated. They do not mean the same thing. "Commerce" has a much wider connotation and significance than "trade." While trade refers to buying and selling alone, commerce is concerned with not merely buying

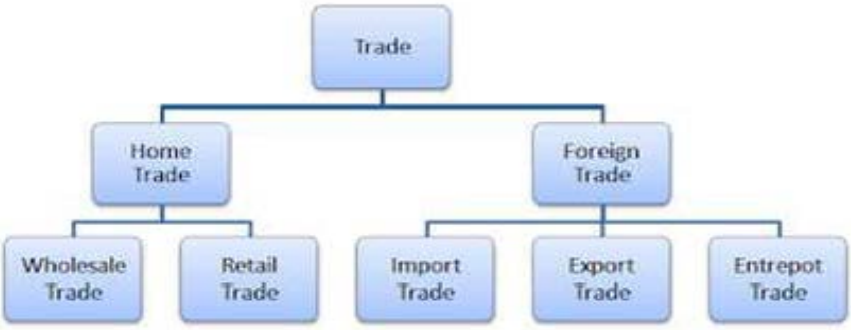
And selling but also facilitates a smooth flow of goods and services from the producer to the consumer with the help of aids to trade. Trade means the buying and selling of goods. A trader purchases goods not for his own use but for the purpose of sales to other traders and consumers at a profit. Traders act as an intermediary between producers and consumersandearn profit from buying and selling operations in the course of exchange.

11.9.1 Trade

Trade means the buying and selling of goods for money. There are two people involved in trade, namely, the buyer and the seller. In trade, the ownership of goods or services is transferred from one person to another in consideration of cash or cash equivalents. Trade can be done between two parties or more than two parties. When the buying and selling take place between two persons, it is called

bilateral trade whereas when it is done betweenmore than two persons, then it is called multilateral trade. Earlier the trade was little cumbersome since it followed the barter system where goods were exchanged in return of other goods or commodities. It is hard to evaluate the exact value because of the different commodities type involved in the exchange. With the advent of money, this process became more convenient for both the sellers and buyers. Trade can be domestic as well as foreign. Domestic trade means within the border of the country, and foreign trade means across the borders. Foreign trade is done through investment in securities or funds and can be termed as imports and exports.

1 Different Types of Trade



(i) Internal Trade: Internal trade is also known as Home trade. It is conducted within the political and geographical boundaries of a country. It can be at local level, regional level or national level. Hence trade carried on among traders of Delhi, Mumbai, etc. is called home trade. Internal trade can be further sub-divided into two groups, viz.,

(ii) Wholesale Trade: It involves buying in large quantities from producers or manufacturers and selling in lots to retailers for resale to consumers. The wholesaler is a link between manufacturer and retailer. A wholesaler occupies prominent position since manufacturers as well as retailers both are dependent upon him. Wholesaler act as an intermediary between producers and retailers.

(iii) Retail Trade: It involves buying in smaller lots from the wholesalers and selling in very small quantities to the consumers for personal use. The retailer is the last link in the chain of distribution. He establishes a link between wholesalers and consumers. There are differenttypes of retailers small as well as large. Small scale retailers include hawkers, peddlers, general shops, etc.

(iv) External Trade: External trade also called as foreign trade. It refers to buying and selling between two or more countries. For instance, If Mr. X who is a trader from Mumbai sells his goods to

Mr. Y another trader from New York then this is an example of foreign trade. External trade can be further sub-divided into three groups, viz.

(v) Import Trade: When a trader in home country obtains or purchase goods from a trader located in another country, it is called import trade. For e.g. a trader from India purchase goods from a trader located in China.

(vi) Entrepot Trade: When goods are imported from one country and then re-exported after doing some processing, it is called entrepot trade. In brief, it can be also called as re- export of processed imported goods. For e.g. an Indian trader (from India) purchase some raw material or spare parts from a Japanese trader (from Japan), then assembles it
i.e. convert into finished goods and then re-export to an American trader (in U.S.A).

(vii) Export Trade: When a trader from home country sells his goods to a trader located in another country, it is called export trade. For e.g. a trader from India sells his goods to a trader located in China.

2 Need and Importance of Trade

Following points explain the need and importance of foreign trade to a nation.

- Division of labour and specialization: Foreign trade leads to division of labour and specialization at the world level. Some countries have abundant natural resources. They should export raw materials and import finished goods from countries which are advanced in skilled manpower. This gives benefits to all the countries and thereby leading to divisionof labour and specialization.
- Optimum allocation and utilization of resources: Duet specialization, unproductive lines can be eliminated and wastage of resources avoided. In other words, resources are channelized for the production of only those goods which would give highest returns. Thus there is rational allocation and utilization of resources at the international level due to foreigntrade.
- Equality of prices: Prices can be stabilized by foreign trade. It helps to keep the demand and supply position stable, which in turn stabilizes the prices, making allowances for transport and other marketing expenses.
- Availability of multiple choices: Foreign trade helps in providing better choice to the consumers. It helps in making available new varieties to consumers all over the world.
- Ensures quality and standard goods: Foreign trade is highly competitive.To maintains and increases the demand for goods, the exporting countries have to keep up the quality of goods. Thus quality and standardized goods are produced.

- Raises standard of living of the people: Imports can facilitate standard of living of the people. This is because people can have a choice of new and better varieties of goods and services. By consuming new and better varieties of goods, people can improve their standard of living.
- Generate employment opportunities: Foreign trade helpsin generating employment opportunities, by increasing the mobility of labor and resources. It generates direct employment in import sector and indirect employment in other sector of the economy. Such as Industry, Service Sector (insurance, banking, transport, communication), etc.
- Facilitate economic development: Imports facilitate economic development of a nation. This is because with the import of capital goods and technology, a country can generate growth in all sectors of the economy, i.e. agriculture, industry and service sector.
- Assistance during natural calamities: During natural calamities such as earthquakes, floods, famines, etc., the affected countries face the problem of shortage of essential goods. Foreign trade enables a country to import food grains and medicines from other countries to help the affected people.

- Maintains balance of payment position: Every country has to maintain its balance of payment position. Since, every country has to import, which results in outflow of foreign exchange, it also deals in export for the inflow of foreign exchange.
    - Brings reputation and helps earn goodwill: Acountry which is involved in exports earns goodwill in the international market. For e.g. Japan has earned a lot of goodwill in foreign markets due to its exports of quality electronic goods.
    - Promotes World Peace: Foreign trade brings countries closer. It facilitates transfer of technology and other assistance from developed countries to developing countries. It brings different countries closer due to economic relations arising out of trade agreements. Thus, foreigntradecreatesafriendlyatmosphereforavoidingwarsandconflicts. It promotes world peace as such countries try to maintain friendly relations among themselves.

3 Hindrances of Trade

- Hindrance of people: Producers are few in number and are separated from millions of consumers. Producers cannot deal directly with each and every consumer. This means that the producer and the consumer do not know each other. This difficulty is known as "personal hindrance." But in actual practice we do not even feel that such a hurdle is present. Specialist or professional middlemen operate in the process of buying and selling goods. They provide a link between producers and consumers. Wholesalers, retailers, and the intermediaries purchase and hold

the goods and arrange for their sale or distributionto consumers in different localities.

- Hindrance of place: Goods are produced in a few places but are required for use at different places. Geographical distance separates producers and consumers. This difficulty of distance is removed by transport. For example, electronic products produced in Japan are sold throughout the world. French wine is widely consumed in Paris and other places with the help of various means of transport. If goods are not made available at a place where they are needed, their production has no utility. Transport ensures quick supply of goods at different places where demand exists. It has linked up all the areas of the world and enabled the people of all countries to benefit through the exchange of goods.

- Hindrance of time: It is common knowledge that certain goods are produced during particular seasons but are demanded throughout the year. Examples are grain, cotton, etc. Similarly, a few goods are demanded only during a particular season but they have to be manufactured and stored much earlier. For example, wool goods are needed in winter and umbrellas and raincoats in the rainy seasons, but they have to be produced and stored far ahead of the season. Products must be made available at a time when consumers desire or decide to buy. Warehousing removes this difficulty by storing the goods in ready stock to meet any essential or unusual demand.

- Hindrance of risk: During the movement of goods from place to place or during storage, there is the possibility that the goods may be lost or damaged. Damage by fire, loss due to hurricanes, or deterioration due to natural causes are a few examples of risk. Insurance companies cover the various kinds of risks by accepting premiums.

- Hindrance of knowledge: Consumers may not buy the best products available on the market because they may not possess knowledge of market conditions. Hence it is known as hindrance of knowledge. The absence of information about products is a great hindrance when buying. It is overcome by means of advertisements and salesmanship.

- Hindrance of finance: The problem of finance affects the producer, the trader, and the consumer. If the manufacturer is to continue production without any disruption, if the trader is to run his business without shortage of stock, and if the consumers are to satisfy their varied requirements, adequate finance is essential for the producer, the trader, the consumer, and all others connected with trade. There is always a time gap between production and consumption and between purchase and sale. Banks and other financial institutions make available the required funds on certain principles and proper securities.

11.9.2 Commerce

Commerce includes all the activities that help in facilitating the exchange of goods and services from the manufacturer or the producer to the ultimate consumers. Majorly the activities are transportation, banking, insurance, advertising, warehousing, etc. that act as an aide in the successful completion of the exchange. Once the products are manufactured these cannot reach directly to the customer, the same has to pass through a series of activities. The first wholesaler will purchase the product, and with the use of transportation, the goods will be made available to the stores and at the same banking and insurance service will be availed by him to have protection against the loss of goods. The retailer willthen sell to the ultimate consumer. All these activities come under the commerce head. In short, it can be said that commerce is the branch of business that helps to overcome all the hindrances that arise in the facilitation of exchange. Its major function is to satisfy human wants both basic and secondary by making the goods available to different parts of the country. No matter where the goods have been manufactured the commerce has made it possible to reach the world - wide. Stephenson defines commerce as "the sum total of those processes that are engaged in the removal of hindrances of person, place, and time in the exchange of commodities." Evelyn Thomas defines commercial lactivities as" activities dealing with the buying and selling of goods and the distribution of finished products from the producers to the customers."

1 The Nature of Commerce : Commerce is considered to be a part of business. Some feel that commerce and business are synonymous, but this is not the case. The following characteristics will help in understanding the nature of commerce.

(i) Economic activities: All economic activities are undertaken to earn a profit. Commerce deals with all economic activities undertaken for profit. Some activities may be both economic and non-economic. A trader buys goods to sell them again and earn a profit while a consumer buys goods for consumption. In the first case the motive is to make a profit. In the second case the motive of profit is absent. Thus, commerce is concerned with all economic activities directed towards earning profit.

(ii) Exchange of goods and services: Commerce involves an exchange of goods and services for profit. Goods may be produced for the purpose of resale to customers.

(iii) Earning motive: Profit is an incentive for undertaking all commercial activities. Any activity that does not have the incentive of profit will not be a part of commerce. For example, if a trader gives some goods as charity then it will not be a part of commerce because the profit motive is missing.

(iv) Creation of utility: Commerce creates form, place, and time utility in goods. By the conversion of raw material into finished products, the form utility is created. For example, when a carpenter makes furniture out of wood, the goods may not be consumed at the place of production. The goods may be needed in different

places. The goods are therefore taken to those places where they are needed. Transportation facilities help in creating the place utility of goods. The goods are also needed in different periods of time. It maynot be possible to produce the goods whenever they are demanded. The producers go on producing goods as per their capacity. The goods are stored up to the time until they are demanded. The production is done at one time and the consumer gets them as per their need. The storage facilities create time utility of goods.

(v) Regularity of transaction: The transaction should be regular. No isolated transaction will be a part of commerce. The sale of old furniture for replacement bynew furniture is not a part of commerce. At the same time the sale of furniture by a furniture dealer is commerce since the transaction is regular.

2 Branches of Commerce : All those activities that are connected with the transferringof goods and services from producers to users come under commerce. In between these two ends a number of obstacles have to be crossed. The goal of commerce is to ensure a proper flow of goods and services for the benefit of producers and consumers. There may be difficulties with regard to trade, transport, distribution, finance, storage, insurance, publicity, etc. These aspects are dealt with, and the branches of commerce remove various difficulties.

(i)Trade: Trade removes hindrance of people through wholesalers, retailers, and mercantile agents. Goods are owned and possessed by those who produce them. Unless these goods go into the hands of the consumers they will have no meaning for society. Ownership and possession of goods must pass from the producers to the ultimate consumers. Then only consumers can enjoy these goods. This is made possible by the organization of trade. Wholesale traders take goods from the producers and from the wholesale traders. Retail traders take the goods to the consumers. Thus trade through traders removes hindrance of person.

(ii) Transport: Transport removes hindrance of place. Goods may be produced at places where they are in less demand. These goods are to be taken to the place of consumption. With the help of transport facilities we can create "place utility" in goods. The goods are taken from a place where there is less demand to the places where they are in more demand. The place utility helps the producer to increase production and earn are munerative price. The consumer is also helped by supplying him with the goods that otherwise might not have reached him. The various modes of transport, i.e., road, rail, sea, and air, have helped the growth of commerce and industry. A producer can produce goods on any scale, according to the demand.

(iii) Warehousing: Warehousing removes hindrance of time. Many goods, such as cotton, juice, food grains, sugar, etc., are produced during particular seasons of the year, but they are needed year

round. To make these goods available throughout the year, arrangements must be made for their proper storage. Similarly, certain goods, are needed in particular seasons, e.g., wool cloth is required during winter. Raincoats and umbrellas are essential during the rainy season. These goods must be in stock in sufficient quantity before the commencement of the season. This is done with the help of warehousing.

(iv) Banking: There is also the difficulty of finance to consider. There is always a time-gap between the time of production and consumption. During this period, traders need funds to carry on their trade. These funds are made available by commercial banks and other financial institutions.

(v) Advertisement and salesmanship: Consumers may not be aware of the availability of various goods in the market. The absence of information about goods is a great hindrance for buying them. The producer will also like to have more consumers. Advertisement and salesmanship help in informing consumers about the availability and usefulness of various products in the market. With the advent of radio, television, the Internet, etc., consumer awareness about various goods is increasing.

(vi) Insurance: There is a risk involved in transporting goods from one place to another. This can be a risk of fire or theft. The fear of loss of goods due to any cause is an obstacle in the development of trade. Insurance companies provide coverage for all types of losses of goods. Insurance coverage has given a boost to not only national trade but also to international trade.

(vii) Communication: The buyers and sellers need the services of various agencies for communicating their messages among themselves. The producers inform their customers about the production of goods. The intending buyers send orders to producers for the supply of goods. The services of post offices, private courier services, faxes, telephones, cell phones, etc., are utilized for communication purposes.

3 Importance of commerce: Every person wants to lead a happy and comfortable life. Every nation wants to attain a high standard of living. This is possible when goods are produced in plenty at a cheaper cost. It enables the smooth flow of goods from production centers to consumption centers. The continuous flow of goods from one country to another country has lead to the equalization of prices for many commodities in the international market. By frequent trade contacts, people of different countries have come to know of the culture and civilization of other countries. As a result, cultural integration takes place at an international level.

4 Wheel of Commerce: In the modern world we can enjoy a very happy life and a good standard of living because of the development of commerce. Commerce provides all thethings we require to lead a happy life. Commerce refers to all those activities that are necessary to bring goods and

services from their place of origin to their place of consumption. Commerce includes trade and aids to trade. The aids to trade consist of services such as transport, banking, insurance, warehousing, advertising, and communication. In ordinary language the term commerce means the exchange of goods and services of value. But commerce is a more comprehensive term. It includes not only the exchange of goods and services of value but also the services rendered by various other agencies in the free flow of goods and services. Commerce relates to all economic activities resulting in the production, exchange, distribution, and consumption of commodities and services.

11.9.3 Key Differences between Trade and Commerce

Following are the major differences between trade and commerce:

- Trade is selling and buying of goods and services between two or more parties in consideration of cash and cash equivalents. Commerce includes the exchange of goods and services along with activities viz. banking, insurance, advertising, transportation, warehousing, etc. to complement the exchange.
- Trade is a narrow term that merely includes the selling and buying whereas commerce is awider term that includes exchange as well as the several revenues generating activities that complete the exchange.
- Trade is generally done to satisfy the need of both the seller and the buyer which is more of a social perspective. Whereas the commerce is more economical in nature because of the involvement of several parties whose primary aim is to generate the revenue.
- Trade is generally a single time transaction between the parties that may or may not reoccur. Whereas in commerce the transactions are regular and occur again and again.
- The trade involves two parties the seller and the buyer who facilitates the exchange without employing anyone in between. Whereas in commerce exchange is done with the support of several departments there by giving them employment opportunities.
- Trade provides a link between the seller and the buyer, the direct parties involved in the exchange. Whereas the commerce provides a link between manufacturer and the ultimate customer, who are not direct parties, with the help of several aides of distribution.
- Trade represents both the side of demand and supply where both the parties know what is demanded and what is to be supplied. Whereas in commerce only the demand side is known i.e. what is demanded in the market and then making that available through various channels of distribution.

- Trade requires more capital because the stock has to be kept ready that is entitled to the sale and also the cash has to be kept ready for the immediate payment. Whereas in commerce the capital required is less because there are different parties involved who have to manage their resources individually without imposing a burden on one.

11.10 LET US SUM UP

In conclusion of this chapter, all the sub topics discussed in detail, by giving suitable introduction, meaning, definition, concept, nature, types, factor effecting, implications for mankind and others. Resources are of different types and have positive and negative impact on human beings. Environmental degradation is increasing very speedily and needis to adopt precautions to decrees the rate of environmental degradation. Disasters are affecting at large scale to the universe. Transportation and communication are two very important sources for the survival and there are many modes of transportation and communication that human being using presently. Trade is the branch of commerce that deals in only the exchange of goods and services whereas commerce are the comprehensive term that includes all the major activities that facilitate the exchange and generates the revenue for all and commerce is the branch of business that keeps everything together and makes the successful completion of the distribution of goods and services. Trade and commerce are two inter dependent component and highly significant in the management of resources.

11.11 LESSON END EXERCISE

Q.1 Define resources. Discuss distribution of resources in detail.

Q.2 What are the causes of environmental degradation? How you can prevent your environment from its degradation?

Q.3 Explain the concept of disaster and preparedness in detail.

Q.4 Discuss concept of migration and its types and detail.

Q.5 Explain transportation and communication in detail. Why both are important?

Q.6 Discuss the nature of trade and commerce in detail.

Q.7 What is the key difference between trade and commerce?

11.12 SUGGESTED FURTHER READINGS

Heller, F. (1986).The use and abuse of Social Sciences. London: Sage Publications Park, G. (2016). Introducing natural resources. Edinburgh: Dunedin Academic.

Reddy, B.K.(2018). Environment and disastermanagement. Hyderabad: GBK Publications. Sulphey, M. M.(2016). Disaster management. New Delhi: PHILearning Pvt Ltd.

Thord, R. (1993). The future of transportation and communication. Heidelberg, Germany:Springer-Verlag Berlin

Websites:

- www.kisc.meiji.ac.jp/~rubrecht/Downloads%20-%20Main/page21/files/CO1.pdf
- kalyan-city.blogspot.com/2011/03/what-is-trade-meaning-and-nature.html
- kalyan-city.blogspot.com/2011/03/what-is-foreign-trade-types-and.html https:// www.zigya.com/study/book?class..
- www.yourarticlelibrary.com/essay/essay-on-commerce-meaning-nature.../ 42028https://en.wikipedia.org/wiki/Resource
- www.jotscroll.com/.../resources-meaning-definition-types-resources-examples- uses-ge
- https://en.wikipedia.org/wiki/Human_migrationhttps://study.com/academy/lesson/ human-migration-definition-reasons-theories.html
- https://www.conserve-energy-future.com/causes-and-effects-of-environmental- degrad.

11.13 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress- 1. : 1. Chamber, 2. Renewable, 3. Non-renewable, 4. Rain, 5. Environmental studies.

Check Your Progress-2. : 1. True, 2. True, 3. False, 4. True, 5. True.

Check Your Progress-3. : 1. National disasters, 2. Populationmigration, 3. Health issues, 4. Earthquake, 5. Disasters.

******

LESSON NO: 12 UNIT-IV

SUSTAINABLE DEVELOPMENT

STRUCTURE

12.1 Introduction

12.2 Objectives

12.3 Economic Growth and Economic Development

12.3.1 Factors Affecting Economic Growth and Development

12.3.2 Differences between Economic Growth and Economic Development

12.4 Indicators of Measuring the Well Being of an Economy

12.5 Gross Domestic Product

12.5.1 Determining Gross Domestic Product (GDP)

12.5.2 Production Approach

12.6 Poverty

12.7 Food Security

12.8 Role and Functions of Money

12.9 Let Us Sum Up

12.10 Lesson End Exercise

12.11 Suggested Further Readings

12.12 Answers to Check Your Progress

12.1 INTRODUCTION

Today the whole world, particularly the developing countries, faces a near-crisis situation, both economic and environmental. Policy-makers find it difficult to formulate programs that would work under the present situation of escalating population on the one hand and diminishing resources on the other. The environmental decadence inevitably

weakens economy, which, in turn leads to social disintegration. Human history is replete with such instances and the remains of past civilizations in the archaeological sites of the world bear testimony to this. The issues like population stabilization, integrated land use planning, healthy crop land and grassland, woodland and re-vegetation of marginal lands, conservation of biological diversity, control of pollution in water and of air, development of non-polluting renewable energy systems, recycling of waste and residues that are posing threat to our environment as a whole, and to sustainability, in particular. These require immediate attention; otherwise, gains from the developmental activities will be ephemeral.

Sustainability is development that satisfies the needs of the present without compromising the capacity of future generations, guaranteeing the balance between economic growth, care for the environment and social well-being. Sustainable development is a concept that appeared for the first time in 1987 with the publication of the Brundtl and Report, warning of the negative environmental consequences of economic growth and globalization, which tried to find possible solutions to the problems caused by industrialization and population growth. It has been suggested that "the term 'sustainability' should be viewed as humanity's target goal of human-ecosystem equilibrium (homeostasis), while 'sustainable development' refers to the holistic approach and temporal processes that lead us to the end point of sustainability.

Sustainability can be defined as the practice of maintaining processes of productivity indefinitely-natural or human made-by replacing resources used with resources of equal or greater value without degrading or endangering natural biotic systems. Sustainable development ties together concern for the carrying capacity of natural systems with the social, political, and economic challenges faced by humanity. Sustainability science is the study of the concepts of sustainable development and environmental science. There is an additional focus on the present generations' responsibility to regenerate, maintain and improve planetary resources for use by future generations.

12.2 OBJECTIVES

After going through this lesson, you shall be able to:

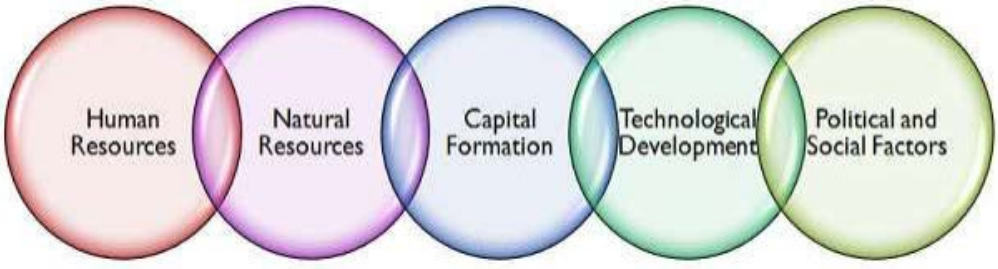
- describe the concept of sustainable development,
- describe the concept of economic growth and development of indian economy,
- discuss about Indian economy,

- explain concept of gross domestic product,
- meaning and types of poverty and food security,
- concept of money and its functions,
- to apply these concepts in real life situations, and
- to solve the daily economic problems.

12.3 ECONOMIC GROWTH AND ECONOMIC DEVELOPMENT

Economic growth in an economy is demonstrated by an outward shift in its Production Possibility Curve (PPC). Another way to define growth is the increase in a country's total output or Gross Domestic Product (GDP). It is the increase in a country's production. Acountry's economic development is usually indicated by an increase in citizens' quality of life. 'Quality of life' is often measured using the Human Development Index, which is an economic model that considers intrinsic personal factors not considered in economic growth, such as literacy rates, life expectancy and poverty rates, there is a discovery of new mineral/metal deposits, there is an increase in the number of people in the workforce or the quality of the workforce improves, there is an increase in capital and machinery and there is an improvement in technology. Development occurs when there isan increase in real income per head - GDP per capita, the increase in levels of literacy and education standards, improvement in the quality and availability of housing, improvement in levels of environmental standards, increased life expectancy.

Economic Grow this defined as the rise in the money value of goods and services produced by all the sectors of the economy per head during a particular period. It is a quantitative measure that show sthe increase in the number of commercial transactions in an economy.



Determinants of Economic Growth

Economic grow this the increase in the inflation-adjusted market value of the goods and services produced by an economy over time. It is conventionally measured as the percent rate of increase in real gross domestic product, or real GDP. Growth is usually calculated in real terms - i.e., inflation-adjusted terms - to eliminate the distorting effect of inflation on the price of goods produced. Measurement of economic growth uses national income accounting. Since economic growth is measured as the annual percent change of gross domestic product (GDP), it has all the advantages and drawbacks of that measure. The economic growth rates of nations is commonly compared using the ratio of the GDP to population or per-capita income. The "rate of economic growth" refers to the geometric annual rate of growth in GDP between the first and the last year over a period of time. Implicitly, this growth rate is the trend in the average level of GDP over the period, which implicitly ignores the fluctuations in the GDP around this trend. An increase in economic growth caused bymore efficient use of inputs (such as labor productivity, physical capital, energy or materials) is referred to as intensive growth. GDP growth caused only by increases in the amount of inputs available for use (increased population, new territory) is called extensive growth.

Economic Development is defined as the process of increase volume of production along with the improvement in technology, arise in the level of living, institutional changes, etc. In short, it is the progress in the socio-economic structure of the economy. Human Development Index (HDI) is the appropriate tool to gauge the development in the economy. Based on the development, the HDI statistics rank countries. It considers the overall development in an economy regarding the standard of living, GDP, living conditions, technological advancement, improvement inself-esteemneeds, the creation of opportunities, per capita income, infrastructural and industrial development and much more.

12.3.1 Factors Affecting Economic Growth and Development

The economic growth of a country may get hampered due to a number of factors, such as trade deficit and alterations in expenditures by governmental bodies. Generally, the economic growth of a country is adversely affected when there is asharp rise in the prices of goods and services. Following are some of the important factors that affect the economic growth of a country:

(a) Human Resource: Human resources refer to one of the most important determinant of economic growth and development of a country. The quality and quantity of available human resource can directly affect the growth of an economy. The quality of human resource is dependent on its skills, creative abilities, training, and education. If the human resource of a country is well skilled and trained then the

output wouldalso be of high quality. On the other hand, a shortage of skilled labor hampers the growth of an economy, whereas surplus of labor is of lesser significance to economic growth. Therefore, the human resources of a country should be adequate in number with required skills and abilities, so that economic growth can be achieved.

(b) Natural Resources: Natural resources affect the economic growth and development of a country to a large extent. Natural resources involve resources that are produced by nature either on the land or beneath the land. The resources on land include plants, water resources and landscape. The resources beneath the land or underground resources include oil, natural gas, metals, non-metals, and minerals. The natural resources of a country depend on the climatic and environmental conditions. Countries having plenty of natural resources enjoy good growth than countries with small amount of natural resources. The efficient utilization or exploitation of natural resources depends on the skills and abilities of human resource, technology used and availability of funds. A country having skilled and educated workforce with rich natural resources takes the economy on the growth path.

(c) Capital Formation: Capital formation involves land, building, machinery, power, transportation, and medium of communication. Producing and acquiring all these manmade products is termed as capital formation. Capital formation increases the availability of capital per worker, which further increases capital/labor ratio. Consequently, the productivity of labor increases, which ultimately results in the increasein output and growth of the economy.

(d) Technological Development: Technological development refers to one of the important factors that affect the growth and development of an economy. Technology involves application of scientific methods and production techniques. In other words, technology can be defined as nature and type of technical instruments used by a certain amount of labor. Technological development helps in increasing productivity with the limited amount of resources. Countries that have worked in the field of technological development grow rapidly as compared to countries that have less focus on technological development. The selection of right technology also plays an role for the growth of an economy. On the contrary, an inappropriate technology- results in high cost of production.

(e) Social and Political Factors: Social and political factors play a crucial role in economic growth of a country. Social factors involve customs, traditions, values and beliefs, which contribute to the growth of an economy to a considerable extent. For example, a society with conventional beliefs and superstitions resists the adoption of modern ways of living. In such a

case, achieving becomes difficult. Apart from this, political factors, such as participation of government in formulating and implementing various policies, have a major part in economic growth.

(f) New products and services: Another major cause of economic growth and development is the introduction of new products and services and the improvement of existing products. New products create demand, which is necessary to offset the decline in employment that occurs through labor saving technology (and to a lesser extent employment declines due to savings in energy and materials). In the U.S.A. by 2013 about 60% of consumer spending was for goods and services that did not exist in 1869. Also, the creation of new services has been more important than invention of new goods.

12.3.2 Differences between Economic Growth and Economic Development

The fundamental differences between economic growth and development are explained in the points given below:

(i) Economic growth is the positive change in the real output of the country in a particular span of time economy. Economic Development involves a rise in the level of production in an economy along with the advancement of technology, improvement in living standards and so on.

(ii) Economic growth is one of the features of economic development.

(iii) Economic growth is an automatic process. Unlike economic development, which is the outcome of planned and result-oriented activities.

(iv) Economic growth enables an increase in the indicators like GDP, per capita income, etc. On the other hand, economic development enables improvement in the life expectancy rate, infant mortality rate, literacy rate and poverty rates.

(v) Economic growth can be measured when there is a positive change in the national income, whereas economic development can be seen when there is an increase in real national income.

(vi) Economic growth is a short-term process which takes into account yearly growth of the economy. But if we talk about economic development it is a long term process.

(vii) Economic Growth applies to developed economies to gauge the quality of life, but as it is an essential condition for the development, it applies to developing countries also. In contrast to, economic development applies to developing countries to measure progress.

(viii) An economic growth result in quantitative changes but economic development brings both quantitative and qualitative changes.

(ix) Economic growth can be measured in a particular period. As opposed to economic development is a continuous process so that it can be seen in the long run.

12.4 INDICATORS OF MEASURING THE WELL BEING OF AN ECONOMY

(i) Gross Domestic Product (GDP): GDP was designed to measure the production of an economy, not the well-being of a nation. However, for many years it has been used as a proxy for well-being as an increase in GDP is associated with an improvement in other measures of well-being (for example, life expectancy). Using nominal GDP per head to represent well-being, the UK would be ranked 15th among OECD countries.

(ii) Accounting for capital consumption-NDP : One of the key limitations of GDP as a measure of national well-being is that no deduction has been made for the 'wear and tear' of machinery, buildings and other capital products used in the production process. Net Domestic Product (NDP) is obtained by subtracting estimates of the capital used up in the production process from GDP. This may be a superior measure of material well being as it more accurately describes the new wealth created during the period.

(iii) Gross National Income (GNI): Gross National Income not only measures production in an economy but also how much of that production, in addition to resources abroad owned by nationals of a country, is available to nationals of that country. GNI is therefore theoretically a better measure of a society's economic well- being than GDP.

(iv) Human Development Index (HDI): The Composite Index Attempts have been made to develop single index combining social, economic, political indicators based on different development paradigm. The latest and most comprehensive exercise isby UNDP to compute HDI by combining three dimensions such as decent standard of living, knowledge and long and healthy life each with equal weight. Indicators under these three dimensions are still evolving the latest (HDR-2010) set of measurable indicators being per-capita GNI, mean year of schooling and expected year of schooling, and life expectancy at birth. Even the methodology for combing the component indices has undergone change from arithmetic mean to geometric mean.

(v) Genuine Progress Indicator : GPI is a refined version of the Index of Sustainable Economic Welfare developed by Herman Daly and John Cobb in the late 1980s. GPI starts with the same personal consumption data as GDP, but then makes some crucial distinctions. It adjusts for

factors such as income distribution, adds factors such as the value of household and volunteer work, and subtracts factors such as the costs of crime and pollution. Some other important indicators are as following:

- GDP per head (Real Gross Domestic Product per capita) : Growth in GDP could merely reflect a larger population. It is therefore important to account for population growth by considering GDP per head.

- Income available to residents of a country per head (Real Net National Disposable Income per capita) : The total income available to residents of a country is an important indicator as not all income generated by production (GDP) in the UK will be payable to UK residents. Real NNDI per capita is also adjusted for capital consumption, which is generally not regarded as contributing to economic well-being.

- Household Income per head (Real Household and NPISH Gross Disposable Income per capital) : Not all of the income available to residents of a country is available to households – some of it is the income of businesses and the government.

This indicator focuses on the income that is available to individuals. This indicator has been chosen as it gives a full picture of income available to households.

- Household Spending per head (Real household and NPISH final consumption expenditure per capita) : The importance of looking at both income and consumption was highlighted in recent ONS analysis on the impact of income and spending on personal well-being. The analysis showed spending had a stronger relationship with happiness and life satisfaction than income.

- Median Household Income (Real Median Equivalised Household Disposable Income deflated using the HHFCE Implied deflator) : Additionally, while average measures of household income 27 November 2014 Office for National Statistics | 3 per head are helpful, they give no indication about how available resources are distributed. Median income is a measure of the income of a 'typical' household.

- Whole Economy Net Wealth (Net financial and physical assets) : This indicator considers the sustainability of current flows of income and expenditure for the economy as a whole.

- Household Net Wealth (Net household and NPISH financial and physical assets) : This indicator considers the sustainability of current flows of income and expenditure for households.

- Unemployment rate (Unemployment rate, all aged 16 and over) : Unemployment has been shown to have a detrimental impact on personal well-being. In addition, unemployment has

long been used as a measure of the state of the economy.

- Inflation rate (Consumer Prices Index) : Inflation is included for its potential to impact on household income and net wealth.

- Financial situation of households (Financial situation of households over the last 12 months from the Eurobarometer) : It is important to consider individuals perceptions of their income, as well as the reality. It is their own perceptions of income that shapes how well off they consider themselves to be.

Check Your Progress - 1

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. _____ was designed to measure the production of an economy.
2. _____ refer to one of the most important determinant of economic growth and development of a country.
3. _____ involves land, building, machinery, power, transportation.
4. _____ is one of the features of Economic development.
5. By GPI, we mean _____

12.5 GROSS DOMESTIC PRODUCT

For many years, especially since World War II, nations have equated economic growth with progress. Economic growth is an increase in the production and consumption of goods and services, and is indicated by increasing Gross Domestic Product (GDP). GDP, therefore, has become the standard measure of economic progress, even though it was only intended as a macroeconomic accounting tool. Prompted by Wall Street, the Federal Reserve System, and the media, citizens generally applaud increases in GDP.

Gross domestic product (GDP) is a monetary measure of the market value of all final goods and services produced in a period (quarterly or yearly) of time. Nominal GDP estimates are commonly used to determine the economic performance of a whole country or region, and to make international comparisons. Nominal GDP per capita does not, however, reflect differences in the cost of living and the inflation rates of the countries; therefore using a basis of GDP per capita at purchasing power parity (PPP) is arguablymore useful when comparing differences in living standards between different nations.

The OECD defines GDP as "an aggregate measure of production equal to the sum of the gross values added of all resident and institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs)." An IMF publication states that "GDP measures the monetary value of final goods and services—that are bought by the final user—produced in a country in a given period of time (say a quarter or a year)." Total GDP can also be broken down into the contribution of each industry or sector of the economy. The ratio of GDP to the total population of the region is the per capita GDP and the same is called Mean Standard of Living. GDP is considered the "world's most powerful statistical indicator of national development and progress".

12.5.1 Determining Gross Domestic Product (GDP)

Gross Domestic Product can be determined in three ways, all of which should, in principle, give the same result. They are the production (or output or value added) approach, the income approach, or the speculated expenditure approach. The most direct of the three is the production approach, which sums the outputs of every class of enterprise to arrive at the total. The expenditure approach works on the principle that all of the product must be bought by somebody, therefore the value of the total product must be equal to people's total expenditures in buying things. The income approach works on the principle that the incomes of the productive factors ("producers," colloquially) must be equal to the value of their product, and determines GDP by finding the sum of all producers' incomes. It can be measured by three methods, namely:

1. Output Method: This measures the monetary or market value of all the goods and services produced within the borders of the country. In order to avoid a distorted measure of GDP due to price level changes, GDP at constant prices o real GDP is computed. GDP (as per output method) = Real GDP (GDP at constant prices) – Taxes + Subsidies.

2. Expenditure Method: This measures the total expenditure incurred by all entities on goods and services within the domestic boundaries of a country. GDP (as per expenditure method) = C + I + G + (X-IM) C: Consumption expenditure, I: Investment expenditure, G: Government spending and (X-IM): Exports minus imports, that is, net exports.

3. Income Method: It measures the total income earned by the factors of production, that is, labor and capital within the domestic boundaries of a country. GDP (as per income method) = GDP at factor cost + Taxes – Subsidies.

In India, contributions to GDP are mainly divided into 3 broad sectors – agriculture and allied services, industry and service sector. In India, GDP is measured as market prices and the base year for computation is 2011-12. GDP at market prices
= GDP at factor cost + Indirect Taxes – Subsidies

12.5.2 Production Approach

This approach mirrors the OECD definition:

1 Estimate the gross value of domestic output out of the many various economic activities;

2 Determine the [intermediate consumption], i.e., the cost of material, supplies and services used to produce final goods or services.

3 Deduct intermediate consumption from gross value to obtain the gross value added.

Gross value added = gross value of output – value of intermediate consumption.

Value of output = value of the total sales of goods and services plus value of changes in the inventory.

The sum of the gross value added in the various economic activities is known as "GDP at factor cost".

GDP at factor cost plus indirect taxes less subsidies on products = "GDP at producer price".

1 Income approach: The second way of estimating GDP is to use "the sum of primary incomes distributed by resident producer units". If GDP is calculated this way it is sometimes called gross domestic income (GDI), or GDP (I). GDI should provide the same amount as the expenditure method described later. By definition, GDI is equal to GDP. In practice, however, measurement errors will make the two figures slightly off when reported by national statistical agencies.This method measures GDP by adding incomes that firms pay households for factors of production they hire
- wages for labour, interest for capital, rent for land and profits for entrepreneurship.

The US "National Income and Expenditure Accounts" divide incomes into five categories

(i) Wages, salaries, and supplementary labour income

(ii) Corporate profits

(iii) Interest and miscellaneous investment income

(iv) Farmers' incomes

(iv) Income from non-farm unincorporated businesses

These five income components sum to net domestic income at factor cost. Two adjustments must be made to get GDP:

1. Indirect taxes minus subsidies are added to get from factor cost to market prices.
2. Depreciation (or capital consumption allowance) is added to get from net domestic product to gross domestic product.

Total income can be subdivided according to various schemes, leading to various formulae for GDP measured by the income approach.

2 Expenditure approach: The third way to estimate GDP is to calculate the sum of the final uses of goods and services (all uses except intermediate consumption) measured in purchasers' prices. Market goods which are produced are purchased by someone. In the case where a good is produced and unsold, the standard accounting convention is that the producer has bought the good from themselves. Therefore, measuring the total expenditure used to buy things is a way of measuring production. This is known as the expenditure method of calculating GDP.

12.6 POVERTY

Historically, poverty has been related to income, which remains at the core of the concept today. However, "income" is itself no less problematic a concept than "poverty"; it too has to be carefully and precisely elaborated. Other resources such as assets, income in kind and subsidies to public services and employment should be imputed to arrive at a comprehensive but accurate measure of income. People can be said to be in poverty when they are deprived of income and other resources needed to obtain the conditions of life—the diets, material goods, amenities, standards and services— that enable them to play the roles, meet the obligations and participate in the relationships and customs of their society. The determination of a poverty line cannot be based on an arbitrary selection of a low level of income. Only scientific criteria independent of income can justify where the poverty line should be drawn. The multiplicity and severity of different types of deprivation can constitute those criteria. The key is therefore to define a threshold of income below which people are found to be thus deprived.

Poverty is about not having enough money to meet basic needs including food, clothing and shelter. However, poverty is more, much more than just not having enough money. The World Bank

Organization describes poverty in this way:

"Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time.

Poverty has many faces, changing from place to place and across time, and has been described in many ways. Most often, poverty is a situation people want to escape. So poverty is a call to action — for the poor and the wealthy alike — a call to change the world so that many more may have enough to eat, adequate shelter, access to education and health, protection from violence, and a voice in what happens in their communities."

Poverty is humiliation, the sense of being dependent on them, and of being forced to accept rudeness, insults, and indifference when we seek help. -Latvia (1998)

In addition to a lack of money, poverty is about not being able to participate in recreational activities; not being able to send children on a day trip with their schoolmates or to a birthday party; not being able to pay for medications for an illness. These are all costs of being poor. Those people who are barely able to pay for food and shelter simply can't consider these other expenses. When people are excluded within a society, when they are not well educated and when they have a higher incidence of illness, there are negative consequences for society. We all pay the price for poverty. The increased cost on the health system, the justice system and other systems that provide supports to those living in poverty has an impact on our economy.

While much progress has been made in measuring and analyzing poverty, the World Bank Organization is doing more work to identify indicators for the other dimensions of poverty. This work includes identifying social indicators to track education, health, access to services, vulnerability, and social exclusion.

Poverty is the scarcity or the lack of a certain (variant) amount of material possessions or money. Poverty is a multifaceted concept, which may include social, economic, and political elements. Absolute poverty, extreme poverty, or destitution refers to the complete lack of the means necessary to meet basic personal needs such as food, clothing and shelter. The threshold at which absolute poverty is defined is considered to be about the same, independent of the person's permanent location or era. On the other hand, relative poverty occurs when a person who lives in a given country does not enjoy a certain minimum level of "living standards" as compared to the rest of the population of that country. Therefore, the

threshold at which relative poverty is defined varies from country to another, or from one society to another. Providing basic needs can be restricted by constraints on government's ability to deliver services, such as corruption, tax avoidance, debt and loan conditional ties and by the brain drain of health care and educational professionals. Strategies of increasing income to make basic needs more affordable typically include welfare, economic freedoms and providing financial services.

1 Causes of Poverty: There is no one cause of poverty, and the results of it are different in every case. Poverty varies considerably depending on the situation. Feeling poor in Canada is different from living in poverty in Russia or Zimbabwe. The differences between rich and poor within the borders of a country can also be great. Some of important causes of poverty are:

- Lack of control in local food
- Corruption is both a major cause and a result of poverty around the world.
- Lack of access to education
- Mental illness, lack of proper psychiatric care
- World hunger, the economic development in the world
- Epidemic diseases
- Over Population

3 Absolute poverty: Absolute poverty refers to a set standard which is consistent over time and between countries. First introduced in 1990, the dollar a day povertyline measured absolute poverty by the standards of the world's poorest countries. The World Bank defined the new international poverty line as $1.25 a day in 2008for 2005 (equivalent to $1.00 a day in 1996 US prices). In October 2015, they resetit to $1.90 a day. Absolute poverty, extreme poverty, or abject poverty is "a condition characterized bysevere deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to services."The term 'absolute poverty', when used in this fashion, is usually synonymous with 'extreme poverty':

4 Relative poverty: Relative poverty views poverty as socially defined and dependent on social context, hence relative poverty is a measure of income inequality. Usually, relative poverty is measured as the percentage of the population with income less than some fixed proportion of median income. There are several other different income inequality metrics, for example, the

Gini coefficient or the Theil Index.Relative poverty is the "most useful measure for ascertaining poverty rates in wealthy developed nations. Relative poverty measure is used by the United Nations Development Program (UNDP), the United Nations Children's Fund (UNICEF), the Organization for Economic Co-operation and Development (OECD) and Canadian poverty researchers. In the European Union, the "relative poverty measure is the most prominent and most–quoted of the EU social inclusion indicators".

Key Facts and Figures on Poverty

1. Close to 900 million people around the world live in severe poverty based on an income poverty line of $1.90 a day in 2015.
2. Poverty levels remain high globally, and are particularly concentrated in sub-Saharan Africa and South Asia.
3. Global poverty is concentrated in lower middle income countries and countries dependent on natural resources as well as in fragile and conflict-affected states.
4. Looking beyond the income measure, 1.6 billion people are considered poor across measures of access to social services and security, with the largest global share of poor people being in South Asia and the highest intensity in sub-Saharan Africa
5. Among other factors, demographic growth is a major challenge to poverty reduction in sub-Saharan Africa.
6. Meeting the 2030 target of eradicating poverty is contingent on addressing income distributional patterns as well as incorporating environmental factors in economic policies.
7. Climate change could account for close to 10.1 million more poor people by the middle of the century.
8. Even if the world succeeds in reaching its target of 3% poverty by 2030, deep pockets of poverty will still remain around parts of the world therefore Sustainable Development Goal will not be met.

Check Your Progress - 2

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. G.D.P. can be determined in three ways. (True/False)
2. Absolute poverty refers to a set standard which is consistent over time for between contries. (True/False)
3. Food security implies to shortage of food. (True/False)
4. The final report of the World Food Summit was held in 1996. (True/False)
5. The term absolute poverty is usually used as synonymous with extreme poverty. (True/False)

12.7 FOOD SECURITY

Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. - World Food Summit, 1996.

"Every man, woman and child has the inalienable right to be free from hunger and malnutrition in order to develop fully and maintain their physical and mental faculties. Accordingly, the eradication of hunger is a common objective of all the countries of the international community, especially of the developed countries and others in a position to help." (United Nations, 1975. Report of the World Food Conference, Rome 5-16 November 1974. New York)

Food security is a condition related to the availability of food supply, group of people such as (ethnicities, racial, cultural and religious groups) as well as individuals' access to it. There is evidence of granaries being in use over 10,000 years ago, with central authorities in civilizations including ancient China and ancient Egypt being known to release food from storage in times of famine. At the 1974 World Food Conference the term "food security" was defined with an emphasis on supply. Food security, they said, is the "availability at all times of adequate, nourishing, diverse, balanced and moderate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices". Later definitions added demand and access issues to the definition. The final report of the 1996 World Food Summit states that food security "exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life". Food security can be measured by calorie intake per

person per day. In general theobjective of food security indicators and measures is to capture some or all of the main components of food security in terms of food availability, access and utilization or adequacy. While availability (production and supply) and utilization/adequacy (nutritional status/anthropometric measures) seemed much easier to estimate, thusmore popular, access (ability to acquire sufficient quantity and quality) remain largely elusive. The factors influencing household food access are often context specific. Thus the financial and technical demands of collecting and analyzing data on all aspects of household's experience of food access and the development of valid and clear measures remain a huge challenge.

1 Pillars of food security: He WHO states that there are negative one pillars that determine food security: food availability, food access, and food use. The FAO adds a fourth pillar: the stability of the first three dimensions of food security over time. In 2009, the World Summit on Food Security stated that the "four pillars of food security are availability, access, utilization, and stability".

2 Availability: Food availability relates to the supply of food through production, distribution, and exchange. Food production is determined by a variety of factors including land ownership and use; soil management; crop selection, breeding, and management; livestock breeding and management; and harvesting. Crop production can be affected by changes in rainfall and temperatures. The use of land, water, and energy to grow food often competes with other uses, which can affect food production. Land used for agriculture can be used for urbanization or lost to desertification, salinization, and soil erosion due to unsustainable agricultural practices. Crop production is not required for a country to achieve food security. Nations don't have to have the natural resources required to produce crops in order to achieve food security.

3 Access: Food access refers to the affordability and allocation of food, as well as the preferences of individuals and households. The UN Committee on Economic, Social, and Cultural Rights noted that the causes of hunger and malnutrition are often not a scarcity of food but an inability to access available food, usually due to poverty. Poverty can limit access to food, and can also increase how vulnerable an individual or household is to food price spikes. Access depends on whether the house- hold has enough income to purchase food at prevailing prices or has sufficient landand other resources to grow its own food.

4 Utilization: The next pillar of food security is food utilization, which refers to the metabolism of food by individuals. Once food is obtained by a household, a variety of factors affect the quantity and qualityof food that reaches members of the household. In order to achieve food security,

the food ingested must be safe and must be enough to meet the physiological requirements of each individual. Food safety affects food utilization, and can be affected by the preparation, processing, and cooking of food in the community and household. Nutritional values of the household determine food choice, and whether food meets cultural preferences is important to utilization in terms of psychological and social well-being.

5 Stability: Food stability refers to the ability to obtain food over time. Food insecurity can be transitory, seasonal, or chronic. In transitory food insecurity, food may be unavailable during certain periods of time. At the food production level, natural disasters and drought result in crop failure and decreased food availability. Civil conflicts can also decrease access to food. Instability in markets resulting in food-price spikes can cause transitory food insecurity. Other factors that can temporarily cause food insecurity are loss of employment or productivity, which can be caused by illness. Seasonal food insecurity can result from the regular pattern of growing seasons in food production.

12.8 ROLE AND FUNCTIONS OF MONEY

Money is any item or verifiable record that is generally accepted as payment for goods and services and repayment of debts in a particular country or socio-economic context. The main functions of money are distinguished as: a medium of exchange, a unit of account, a store of value and sometimes, a standard of deferred payment. Any item or verifiable record that fulfills these functions can be considered as money. Money is historically an emergent market phenomenon establishing a commodity money, but nearly all contemporary money systems are based on fiat money. Fiat money, like any check or note of debt, is without use value as a physical commodity. It derives its value by being declared by a government to be legal tender; that is, it must be accepted as a form of payment within the boundaries of the country, for "all debts, public and private". The money supply of a countryconsists of currency (banknotes and coins) and, depending on the particular definition used, one or more types of bank money (the balances held in checking accounts, savings accounts, and other types of bank accounts). Bank money, which consists only of records (mostlycomputerized in modern banking), forms by far the largest part of broad money indeveloped countries.

1 Functions of Money: Money is often defined in terms of the three functions or services that it provides. Money serves as a medium of exchange, as a store of value, and as a unit of account,

Money's most important function is as a medium of exchange to facilitate transactions.

2 Medium of exchange: Money's most important function is as a medium of exchange to facilitate transactions. Without money, all transactions would have to be conducted by barter, which involves direct exchange of one good or service for another. The difficulty with a barter system is that in order to obtain a particular good or service from a supplier, one has to possess a good or service of equal value, which the supplier also desires.

3 Store of value: In order to be a medium of exchange, money must hold its value over time; that is, it must be a store of value. If money could not be stored forsome period of time and still remain valuable in exchange, it would not solve the double coincidence of wants problem and therefore would not be adopted as a medium of exchange. As a store of value, money is not unique; many other stores of value exist, such as land, works of art, and even baseball cards and stamps. Money may not even be the best store of value because it depreciates with inflation.

4. Unit of account: Money also functions as a unit of account, providing a common measure of the value of goods and services being exchanged. Knowing the value or price of a good, in terms of money, enables both the supplier and the purchaser of the good to make decisions about how much of the good to supply and how much of the good to purchase.

5. A Measure of Value: Under the barter system, it is very difficult to measure the value of goods. For example, a horse may be valued as worth five cows or 100quintals of wheat, or a Maruti car may be equivalent to 10 two- wheelers. Thus oneof the disadvantages of the barter system is that any commodity or service has a series of exchange values. Money is the measuring rod of everything. By acting as a common denominator it permits everything to be priced, that is, valued in terms ofmoney. Thus, people are enabled to compare different prices and thus see the relative values of different goods and services.

This serves two basic purposes:

(1) Households (consumers) can plan their expenditure and

(2) Business people can keep records of income and costs in order to work out their profit and loss figures.

6. The Basis of Credit: Money facilitates loans. Borrowers can use money to obtain goods and services when they are needed most. A newly married couple, forexample, would need a lot of money to completely furnish a house at once. They are not required to wait for, say ten years, so as to be able to save enough money to buy costly items like cars, refrigerators, T.V. sets, etc.

Check Your Progress - 3

Note: (a) Answer the questions given below.

(b) Compare your answers with those given at the end of the lesson.

1. _____ states that there are negative one pillars that determine food security.
2. The _____ committee on economic, social and cultural rights noted that the courses of hunger and malnutrition are often not a scarcity of food.
3. _____ is used as medium of exchange to facilitate transactions.
4. _____ which consists only of records forms by far the largest part of broad money in developed countries.
5. _____ can use money to obtain goods and services when they are needed most.

12.9 LET US SUM UP

In this lesson, we have discussed about sustainable development and various economics concepts like economic growth and development, indicators of Indian economy, poverty, food security, gross domestic product and money. Economic growth in an economy is demonstrated by an outward shift in its Production Possibility Curve. Another way to define growth is the increase in a country's total output or Gross Domestic Product (GDP). It is the increase in a country's production. A country's economic development is usually indicated by an increase in citizens' quality of life. Gross domestic product is most important indicator of well- being of economy. These concepts are related to each other .The one depends on another. The knowledge of these concepts helps us to solve various real life problems.

12.10 LESSON END EXERCISE

1. What are the indicators of good economic growth of economy? Explain in detail.
2. What do you know about GDP? How you can determine GDP of an economy?
3. Explain functions of money in detail.
4. What are various types of poverty?

5. How economic growth and development can be used as indicator of economy?
6. Describe pillars of food security.
7. What is sustainable development?

12.11 SUGGESTED FURTHER READINGS

Agarwal, P. (2016). Economic growth and development. Retrieved on 14 June, 2018 from http://www.intelligenteconomist.com

Bjork, G. J. (1999). The way it worked and why it won't: Structural change and the slowdown of U.S. economic growth (pp 2- 67). Westport, CT; London: Praeger.

Gordon, R. J. (2016). The rise and fall of American growth. Princeton, NJ USA: Princeton University Press.

Kahle, L. R., & Gurel-Atay, E. (2014). Introduction to the psychology of communicating sustainability. Communicating sustainability for the green economy, 3-21.

Rangarajan, C., & Dholakia, B.H. (1979). Principles of macro-economics. New Delhi :Tata-McGraw Hill.

Saigal, K. (2008).Sustainable development: The spiritual dimension. Kalpaz publications

Shaker, R. R. (2015).The spatial distribution of development in Europe and its underlying sustainability correlations. Applied Geography, 63, 304-314. Retrieved from www.economicsdiscussion.net

https://keydifferences.com/difference-between-economic-growth-and- economic-development.html#ComparisonChart.

12.12 ANSWER TO CHECK YOUR PROGRESS

Check Your Progress- 1. : 1. Gross domestic product, 2. Human resource, 3. Capital formation, 4. Economic growth, 5. Genuine progress indicator.

Check Your Progress-2. : 1. True, 2. True, 3. False, 4. True, 5. True.

Check Your Progress-3. : 1. WHO, 2. UN, 3. Money, 4. Bank Money, 5. Borrowers.

******